ONSLOW COUNTY LAND USE PLAN

1981

Prepared For Onslow County Board of Commissioners

Ormond Barbee, Chairman

Edward Hurst Luther Midgett Joseph C. Bynum, Jr. Paul Starzynski

Onslow County Planning Board

Julius Segerman, Chairman

James Rouse, Vice-Chairman Mack W. Weatherington

Harold C. Morton Ellis Hines

Onslow County Planning Department

Kenneth N. Windley, Jr. Carey H. Brigman Tina R. Collum Norma F. Sammito Lisa L. Turner

The preparation of this document was financed in part through a grant provided by the North Carolina Coastal Management Program, through funds provided by the Coastal Zone Management Act of 1972, as amended, which is administered by the Office of Coastal Zone Management, National Oceanic and Atmospheric Administration.

HD

211

.O57

O57

1981

COASTAL ZONE

INFORMATION CENTER

HD211.057 057 1381

TABLE OF CONTENTS

	PAGE
INTRODUCTION	
ISSUES IN THE 1975 LAND USE PLAN	1
GOALS AND OBJECTIVES OF THE 1975 LAND USE PLAN	1
EFFECTIVENESS OF THE 1975 GOALS AND OBJECTIVES	2
EXISTING POPULATION	. · · 5
ECONOMY	11
Labor Force	11
Income Retail Sales Camp Lejeune Industry Agriculture Travel and Tourism Seafood	14 15 16 17 19 21 22
EXISTING LAND USE	24
Significant Land Use Compatibility Problems and Unplanned Development Areas Likely to Experience Change In Predominant Land Uses	27 _. 30
PHYSICAL LIMITATIONS FOR DEVELOPMENT	32
Hazard Areas Soil Limitations Airport Hazard Steep Slopes Water Supply and Quality	32 33 35 37 38
FRAGILE AREAS	43
AREAS WITH RESOURCE POTENTIAL	50
Forestry Productive Agricultural Lands Potentially Valuable Mineral Sites Publicly Owned Lands Other Recreation Areas Wildlife Sanctuaries	50 51 51 52 52 53
WILDLITO SANCTUATIOS	7.7

		7 1.0	
	FURIDE DEMANDS	PAGE	
	FUTURE DEMANDS	55	
	Population Projections	55	
	Future Economy	57	
	racare recommy		
	COMMUNITY FACILITIES	59	
.		•	
	Solid Waste Disposal	59	
	County Schools	61	
	Water and Sewer	. 61	
	Fire Departments	67	
	Parks	72	
	Coastal Carolina Community College	72	
•	Transportation	73	
		_	
	FUTURE LAND NEEDS	75	
	West Onslow Beach	77	
	COMMINITED PRACTITUTES DEMANDS	70	
•	COMMUNITY FACILITIES DEMANDS	79	
•	Soild Waste	79 ·	
•	Schools	80	
	Parks and Recreation	80	
		•	
	COMMUNITY ISSUES	81	
	Growth of Onslow County	81	
	Resource Protection	82	
	Resource Production and Management	85	
	Economic and Community Development	`88	
•	LAND CLASSIFICATION	94	
·	LAND CLASSIFICATION	74	
	APPENDIX	96	
		30	
	Public Participation	97	
	Data Collection and Analysis	98	
	Onslow County Plans, Policies and Regulations	101	
	Questionnaire Results	106	
		·	
	•		

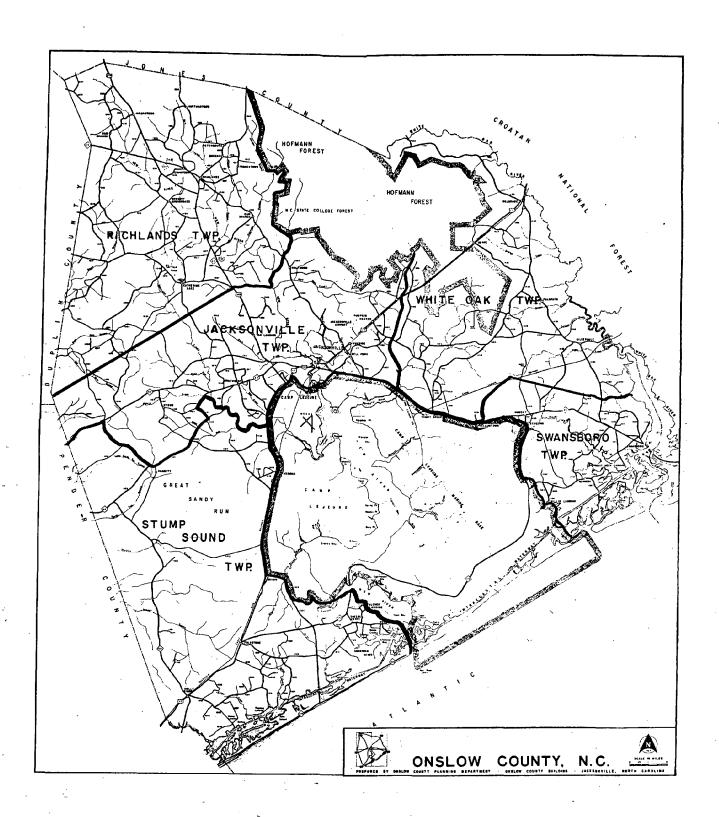
LIST OF MAPS

Мар	1 -	Average Daily Traffic Volumes, 1977 & 1979	Page 28
Мар	2 -	General Soil Map	36
Мар	3 ~	The Geographical Distribution of Aquifers Used	
		Within Onslow County	39
Мар	4 -	The Probably Depth of Brackish Groundwater	42
Мар	5 -	Areas of Environmental Concern	48
Мар	6	Prime Wildlife Areas and Sanctuaries	54
Мар	7 -	County Parks, Landfill and Container Sites	60
Мар	8 -	Onslow County Public Schools	63
Мар	9 -	Onslow County Water System	65
Мар	10 -	201 Facilities	66
Мар	11 -	Volunteer Fire Department Districts	71
Мар	12 -	Onslow County Thoroughfare Proposal	74
Мар	13 -	Land Classification	96

LIST OF TABLES

		Page
Table 1 -	Onslow County Population Growth, 1930 - 1980	5
Table 2 -	Onslow County Population by Age Groups, Sex	,
·.	and Race - 1970	6
Table 3 -	Onslow County Population by Age Groups, Sex	
	and Race - 1980	. 7
Table 4 -	Population by Area - 1980	8
Table 5 -	Population by Township	9
Table 6 -	Comparisons of Population Trends in Surrounding	
	Counties	9
Table 7 -	Population Figures at Camp Lejuene	10
Table 8 -	Military Population in Onslow County	10
Table 9 -	Labor Force by Sex and Minority Status	11
Table 10 -	Average Weekly Wages Per Selected Industry Group	12
Table 11 -	Trends in Unemployment Rate	13
Table 12 -	Estimated Employment by Industrial Breakdown for	
	Onslow County	13
Table 13 -	Resident Income Levels For Region P, N. C. , and	
	the U. S.	14
Table 14 - 🔻	1975 and 1980 Annual Payrolls	14
Table 15 -	Retail Sales in Jacksonville and Onslow County,	
	1969 - 1979	15
Table 16 -	Industrial Growth in Onslow County, 1941 - 1980	17
Table 17 -	Gross Farm Income - Onslow County	19
Table 18 -	Changes in Agricultural Factors in Onslow County,	
	1951 - 1978	20
Гаb1е 19 -	Estimated Travel and Tourism Expenditures of	
	Surrounding Counties -	21
Table 20 -	Commercial Fishing Catches - 1975 & 1979	23
Tab1e 21 -	Existing Land Uses - West Onslow Beach	26
Table 22 -	1981 Existing Land Uses - Onslow County	26
Table 23 -	Estuarine Fishing Waters	46
Table 24 -	Timber Volumes	50
Cable 25 -	Future Population Estimates	55

Table 26 -	Population Projections for West Onslow Beach	56
Table 27 -	Civilian Employment by Industrial Breakdown	58
Table 28 -	Estimated Future Employment by Industrial	
	Breakdown	58
Table 29 -	Solid Waste Dumped Per Container	59
Table 30 -	Data for Onslow County Schools	62
Table 31 -	Volunteer Fire Department Equipment	68
Table 32 -	Piedmont Airlines Traffic, Albert J. Ellis	
	Airport, 1975 - 1980	73
Table 33 -	Onslow County Land Use Needs	76



INTRODUCTION

Onslow County is located in the coastal plains region of eastern North Carolina. As one of the twenty counties regulated by the North Carolina Coastal Area Management Act, Onslow County is responsible for updating its County Land Use Plan at least every five years. The Land Use Plan will be used by local government, private individuals and other levels of government as they make decisions concerning future development. Therefore, a public participation campaign has been a major emphasis in updating the Land Use Plan.

A large amount of effort has been made to make this Land Use Plan into a workable instrument involving efficient use of public services, wise use of land, sound economic policies and protection of the health and safety of our citizens. The following plan represents the work of the Onslow County Commissioners, the Onslow County Planning Board, the Citizens Advisory Council and many other citizens who are interested in Onslow County's future.

ISSUES DISCUSSED IN THE 1975 LAND USE PLAN

For existing development:

- To provide for expansion of water and sewer services.
- To provide for expansion of some local governmental buildings.
- 3. A need to develop markets for local commodities.
- 4. A need to improve storm drainage.
- 5. A need to encourage industrial employment opportunities.

For future development:

- 1. A desire that the county continue to grown and prosper.
- 2. A desire for more industrial development and a diversified economy that would provide more jobs.
- 3. A desire that future growth be guided by a plan based on sound decisions that would reflect the highest and best use of the land and which would reflect community needs and desires.
- A desire that all available technical resources be utilized to accomplish sound land use and growth.

GOALS AND OBJECTIVES OF THE 1975 LAND USE PLAN

1. Goal - Land Use Planning

Objective - To make our county a place where people can live, work and plan under the best conditions possible by providing sound environmental and developmental decisions that will enable maximum services to be provided at a minimal cost.

2. Goal - Commercial Growth

Objective - To make commercial areas conveniently accessible to other areas, preventing intrusion into residential neighborhoods, encouraging aesthetics in building, maintaining efficient traffic patterns, and pormoting a diversification of activities.

3. Goal - Industrial Growth

Objective - To encourage additional industrial development and promote a rapid expansion of industrial activities that will offer additional job opportunities and a diversified economy.

4. Goal - Agricultural Growth

Objective - To promote the development of self-sustaining farming activities by protecting productive farmland and by promoting farm product markets.

5. Goal - Commercial Fishing Growth

Objective - To encourage the development of seafood processing and marketing facilities, to continue to promote the improvement of the channels of our inlets and of our access areas to the estuarine area, and to promote the development of additional docking facilities along our coast.

6. Goal - Community Facilities Provision

<u>Objective</u> - To maintain or enhance existing facilities, including all government buildings; and to plan for new ones to accomodate future growth, in order that all citizens be properly served by these facilities.

7. Goal - Utility

Objective - To promote the development of water and sewer facilities that will insure that proper removal and disposal of storm water, sewage, and solid waste.

8. Goal - Economic Growth

<u>Objective</u> - To work towards establishing a more diversified and balanced economy in order to provide more job opportunities and to make job training available.

EFFECTIVENESS OF THE 1975 GOALS AND OBJECTIVES

Much of the information related to these goals and objectives will be covered in separate sections. However, a brief discussion is necessary at this point to give a summary of their effectiveness.

Since 1975 the regulations of the Coastal Area Management Act have been strictly enforced in Onslow County. The County has also adopted county-wide Subdivision Regulations to insure the proper development of residential subdivisions. At this time the County Planning Board is

reviewing a new zoning ordinance which should be in effect by the spring of 1981. A Land Use and Noise Analysis has also recently begun on the land surrounding Albert J. Ellis Airport. Onslow County has begun implementing portions of a Beach Access Plan for West Onslow Beach.

Very little commercial growth has occured outside the planning jurisdiction of the city of Jacksonville since 1976. With the exception of Westpark Shopping Center at the intersection of N. C. 53 and U. S. 258, most commercial development has continued in strips along major highway.s Within Jacksonville's planning jurisdiction a large mall is under construction at the corner of Western Boulevard and Country Club Road.

Industrial growth has continued at an active pace with the addition of several new industries in the county. Most of the recent growth has occured near Jacksonville. However, industrial parks throughout the county are in the planning phase. A new skills center to be built at Coastal Carolina Community College will provide technical training for many residents.

Farm income for Onslow County has not kept pace with economic conditions. This may result in more farmland being available for development. Onslow County presently has no program to protect prime farmland, nor does the State of North Carolina.

Commercial fishing catches have increased dramatically since 1973, not only in pounds caught but the value of the catch. Seafood marketing and processing facilities have not increased, however. Channels into the Sneads Ferry and Swansboro areas need dredging.

Community facilities and utilities have increased greatly. Two new schools have been built, a new county administration and court building was completed in 1979, and a new county water system serving much of Onslow County is nearing completion. Swansboro and Jacksonville have completed their "201" Wastewater Facilities construction work. The Topsail Island 201 plan is still under review by the Environmental Protection Agency. The solid waste program continues to use landfill space at a rapid pace. Additional acreage must be found. Present plans also call for possibly locating container sites near Belgrade and Sneads Ferry.

Onslow County has made a steady effort to provide a diversified economy and more job opportunities for its citizens.

In 1969 the County organized and funded the Economic Development Commission (EDC). In 1970, in cooperation with the EDC, local businessmen organized Your Onslow Opportunities Unlimited (YOU, Inc.) dedicated to attracting new business and industry to Onslow County. The EDC was instrumental in establishing additional private and quasi-public agencies which have contributed to the economic growth of the County. These agencies are as follows:

Year Organized	Agency
1975	The Onslow County Industrial Bonding Authority assists industry in obtaining financing at favorable rates.
1976	The Onslow Business Industry Association (OBIA) promotes inter-industry social and busines relationships.
1977	The Onslow County Transportation Committee works to promote highway improvements in the County.
1978	The Onslow Industry Association assists industry with various industrial problems such as local labor relations.

EXISTING POPULATION

Onslow County has historically been a rural county and still is to a large degree. However, the location of Camp Lejeune in Onslow County in 1941 began a series of changes that are reflected in the large increase in population shown on the table below.

ONSLOW COUNTY POPULATION GROWTH TABLE 1 1930 - 1980

;	Population	1.0	To Increase
1930	15,289	**	17%
1940	17,939		17%
1950	42,047		134%
1960	86,208	=	105%
1970	103,126	• ,	20%
1980	112,165*		9%

Source: U.S. Bureau of the Census .
*Preliminary Estimate

The percent increase has dropped dramatically since 1960 due to a number of reasons, among them the leveling off of troop strength at Camp Lejeune and the subsquent leveling off of the local economy affected by Camp Lejeune.

Onslow County contains approximately 756 square miles, or about 148 people per square mile. The actual density could be larger if Hoffman Forest property owned by the State of North Carolina and containing about 8% of the county's land area was excluded from the total square miles.

The following table shows Onslow County's population by age, sex and ethic origin according to the 1970 census (1980 figures are only preliminary). As the 1976 Land Use Plan pointed out, there are a large number of males in the 15 - 24 age group due to the number of young men in stationed at Camp Lejeune.

TABLE 2
ONSLOW COUNTY POPULATION BY AGE GROUPS, SEX AND RACE
1970 CENSUS

		MA	WHITE	2	NEGRO	0	OTHERS	01	TOTAL
	AGES	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMAL
	UNDER 5	4,056	3,772	810	824	70	77	4,936	4,673
	5-14	7,508	7,077	1,615	1,639	105	93	9,228	8,809
-	15-24	28,006	8,442	4,637	1,295	44	901	33,084	9,843
	25-34	5,761	5,152	867	842	19	244	689'9	6,238
	35-44	3,923	3,429	535	589	48	84	4,506	4,166
	45-54	2,304	2,317	348	379	Œ	2	2,660	2,708
- ,	55-64	1,223	1,382	259	312	0	G	1,482	1,700
-6-	65 B OVER	829	9011	203	233	2	_	1,064	1,340
	TOTAL	53,640	32,677	9,274	6,113	735	687	62,639	39,177
			o.						
	20,963 MORE	WHITE MALE	MORE WHITE MALES THAN WHITE	FEMALES	•	PER	PERCENTAGE	MALE-FEMALE	
	3,161 MORE	NEGRO MALES THAN		NEGRO FEMALES		TOTAL	•	18 YEARS &	A OVER
	48 MORE	MALES THA	MORE MALES THAN FEMALES IN OTHER	OTHER RACES	ES	61.7 MALE	ALE	66.0 MALE	m
	21,172 MORE		MALES THAN FEMALES IN	IN ALL RACES	Sa	38.3 FEMALE	MALE	34.0 FEN	FEMÁLE
	TOTAL POPULATION	TION		103,126			% OF PO	POPULATION	
	WHITE			86,317			83.	۲. ۵	
	OTHERS			1,422			<u> </u>	y -	
	THESE TOTALS	INCLUDE	THESE TOTALS INCLUDE ALL OF ONSLOW COUNTY	W COUNTY					
	SOURCE: S	STATISTICAL	SUMMARY, O	SLOW COUN	ITY, N.C.	PREPARED	B√	ONSLOW COUNTY	
•	a.	LANNING	PLANNING DEPARTMENT, N	MAY, 1972,	نه				

ONSLOW COUNTY POPULATION BY AGE GROUPS, SEX AND RACE 1980 CENSUS (PRELIMINARY ESTIMATES) TABLE 3

	WHITE	TE	NE	NEGRO	OTHERS	ERS	TOTAL	AL
AGES	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE
UNDER 5	4,412	4,103	188	896	16	4	5,369	5,083
5-14	8,166	7,697	1,757	1,783	<u>=</u>	101	10,037	9,581
15-24	30,461	9,182	5,043	1,409	480	S 11	55,984	9,672
25-34	6,266	5,604	943	916	99	265	7,275	6,685
35-44	4,267	3,730	582	641	52	191	4,901	4,532
45-54	2,505	2,520	3 79	412	σ	် <u>က</u>	2,893	2,945
55-64	1,330		282	339	0	L	1,612	1,549
65 8 OVER	935	1,203	222	253	8		1,157	1,457
TOTAL	58,341	35,542	680,01	6,649	799	747	69,228	42,937

The next table breaks population down by jurisdictional boundaries. As compared to the 1970 census: the Town of Swansboro's population declined by 20%; the Town of Richland's population declined by 13%; the Town of Holly Ridge's population increased by 10%; and the City of Jacksonville's populationed increased by 37%. Most of the Jacksonville increase was due to annexations of developed property adjoining the city while the declines appear related to the drop in persons per household.

TABLE 4 POPULATION BY AREA 1980*

	POPULATION
SWANSBORO	963
RICHLANDS	815
HOLLY RIDGE	457
WEST ONSLOW BEACH	240
CAMP LEJEUNE	35,000
JACKSONVILLE	22,000
COUNTY	52,690
	112,165

*SOURCE: U.S. BUREAU OF THE CENSUS, PRELIMINARY ESTIMATES

Population by township is shown in Table 5. Population figures for Swansboro Township may appear too high but they include some residential areas of Camp Lejeune, as does Jacksonville Township.

TABLE 5
POPULATION BY TOWNSHIP

<u>TOWNSHIP</u>	1960	<u> 1970</u>	% CHANGE	<u> 1980</u> *	% CHANGE
JACKSONVILLE	40,834	55,737	36 %	58,835	6 %
RICHLANDS	7,331	7,572	3 %	8,178	8 %
STUMP SOUND	5,486	5,545	l %	5,933	7.%
SWANSBORO	21,678	20,800	-4%	21,840	5 %
WHITE OAK	10,879	13,472	24%	17,379	29%
TOTALS	86,208	103,126	20%	112,165	8 %

SOURCE: U.S. BUREAU OF THE CENSUS
*PRELIMINARY ESTIMATES

COMPARISONS

OF

Although Onslow County's population continues to grow, the hugh explosion brought about by the opening of Camp Lejeune is nearly over. With troop strength not projected to be increased greatly at the base in the future, growth will be more associated with new industries and businesses locating in the county. This, along with tourism and good locations for persons looking for retirement homes, has brought about large increases in the populations of New Hanover and Carteret counties.

TABLE 6

POPULATION TRENDS IN SURROUNDING

)	
COUNTY	1960	1970	% CHANGE	1980	% CHANGE
CARTERET	27,438	31,603	15.2%	40,794	29.1%
JONES	11,005	9,779	-11.1%	9,673	-1.1%
DUPLIN	40,270	38,015	-5.6%	40,658	7.0%
PENDER	18,508	18,149	-1.9%	22,107	21.8%
CRAVEN	58,773	62,554	6.4%	70,631	12.9%
NEW HANOVER	71,742	82,996	15.7%	102,779	23.8%
ONSLOW	86,208	103,126	19.6%	112,165	8.8%

SOURCE: U.S. BUREAU OF THE CENSUS

In 1960, there was 0.8 dependents residing in Onslow County for each active duty military person. Ten years later this ratio had increased to 1.1 dependents for each active duty military person. In 1974 this figure dropped to 0.85 dependents and by 1980 it dropped even further to 0.68 dependents.

TABLE 7
POPULATION FIGURES AT CAMP LEJEUNE

YEAR	MILITARY POPULAT	CIVIL SERVICE	NON-CIVIL SERVICE
1965	35,416	2,898	1,100
1970	36,044	3,077	1,100
1975	39,000	2,700	1,100
1980	33,305	4,200	1,500
SOURCE:	ONSLOW COUNTY	ECONOMIC DEVELOPMENT	COMMISSION

Active duty personnel levels have remained fairly stable at Camp Lejeune, although 1980 figures are the lowest in the last twenty years. This may have a significant affect on Onslow County's economy if the trend continues.

TABLE 8
MILITARY POPULATION IN ONSLOW COUNTY
(Estimated)

	1960	1970	1974	1980
TOTAL ACTIVE DUTY	36,525	36,044	39,157	33,305
LIVING ON BASE	• •	25,340 .	•	N.A.
LIVING OFF BASE	16,017	11,704	9,357	N.A.
TOTAL DEPENDENT	32,037 X	40,316 ×	3 3, 481 ×	22,549
LIVING ON BASE	. 9,940	. 12,695.	.11,481	. 10,526
LIVING OFF BASE	22,097 *	27,621*	22,000 *	12,023
TOTAL ACTIVE DUTY &				
DEPENDENT POPULATION	68,562* .	76,360*	. 72 , 768* .	. 55,854
PERCENT OF COUNTY POPULATION	79%	74%	68%	50%

*FIGURES PROBABLY TOO HIGH

SOURCE: ONSLOW COUNTY MANPOWER PLANNER, 1974
U.S. MARINE CORPS, CAMP LEJEUNE, 1980

ECONOMY

Onslow County has a very stable economy due to a number of reasons, including the presence of Camp Lejeune in the county as well as several new industries and thriving seafood businesses.

TABLE 9
LABOR FORCE BY SEX & MINORITY STATUS 3/
1979

SEX & MINORITY STATUS	LABOR FORCE	EMPLOYED	UNEMPLOYED	PERCE LABOR FORCE		UTION UNEMPLOYED	UNEMPLOY- MENT RATE
BOTH SEXES							
I. TOTAL	.26,310	24,830	. 1,480	.100.0	100.0	100.0	5.6
2. WHITE	21,780	20,610	1,170	82.8	83.0	79.3	5.4
3. BLACK	4,350	4,070	280	16.5	16.4	19.0	6.4
4. OTHER RACES	180 -	150	30	0.7	0.6	1.7	16.7
5. SPANISH-AMERICAN	250	220	30	1.0	0.9	1.7	12.0
6. MINORITY GROUP 2/	4,780	4,440	340	18.2	17.9	22.4	7.1
FEMALE					,		
7. TOTAL	.12,220	11,120	1,100	100.0	. 100.0	100.0	9.0
8. % OF BOTH SEXES	46,4	44.8	74.1				
9. WHITE	. 9,900	9,030	870	81.0	81.2	79.1	8.8
IO. BLACK	2,170	1,970	200	17.8	17.7	18.6	9.2
II. OTHER RACES	150	120	30	1.2	1.1	2.3	20.0
12. SPANISH-AMERICAN I/	150	120	30	1.2	1.1	2.3	20.0
13. MINORITY GROUP 2/-	. 2,470	. 2,210	260	20.2	19.9	. 23.2	10.5

SOURCE: NORTH CAROLINA EMPLOYMENT SECURITY COMMISSION

^{1/} SPANISH AMERICANS ARE ALSO COUNTED IN THE RACIAL CATEGORIES AS WHITE, BLACK OR OTHER RACES.

^{2/}SUM OF SPANISH-AMERICAN. ETHNIC GROUP AND ALL RACES EXCEPT WHITE.

^{3/ 1970} CENSUS PROPORTIONS FOR SEX & RACE ARE APPLIED TO MOST RECENT LABOR FORCE DATA AVAILABLE.

The following average weekly wage data from the weekly average of total wage payments is divided by average monthly employment, thus reflecting irregular and partial work schedules, season employment, etc. Data should not be confused with actual average weekly pay rates for a standard work week. Wages include overtime pay and salaries to management and supervisory personnel.

TABLE 10

AVERAGE WEEKLY WAGES PER SELECTED INDUSTRY GROUP

- 4

	i				FIR	IST QL	JART	ER OF	' :					
INDUSTRY	19	70	1	971	1	972		973	T	1974		975	1	980
GROUP	N.C.	COUNTY	NC.	COUNTY	N.C.	COUNTY								
TOTAL	\$108	\$ 90	\$113	\$ 92	\$124	\$ 94	\$131	\$101	\$140	\$108	\$147	\$117	\$219	\$191
CONSTRUCTION	114	109	120	114	127	116	139	1111	149	125	16.1	137	213	182
MANUFACTURING	107	83	Lin	85	124	86	130	92	139	98	143	110	230	174
TRANSPORTATION,					i				ŀ					
COMMUNICATION,	ĺ		1		ſ	İ.					I	Í	1	ĺ
& UTILITIES	136	96	147	105	164	IOB	176	119	191	126	201	148	307	228
TRADE	103	90	108	93	1114	94	120	100	129	105	137	112	189	148

SOURCE: EMPLOYMENT SECURITY COMMISSION

For all industrial jobs in the first quarter of 1975, Onslow County's average weekly wage was only 80% of the average weekly wage of industrial workers statewide. This figure jumped to 87% by the first quarter of 1980, showing that gains are being made in Onslow County as our economy diversifies.

A major portion of income within Onslow County begins with payrolls. A large share of Onslow County payrolls are from the following major sources.

The previous table contains a number of striking differences to 1970 figures. Women in the civilian labor force increased by 2,220 (25%). Unemployment among men in the civilian labor force was about 3%, the same as 1970. However, the total unemployment rate has varied greatly over the years.

TABLE 11 TRENDS IN UNEMPLOYMENT RATE ANNUAL AVERAGES - 1962, 1968, 1971, 1975, 1980

COUNTY	UNEMPLOYMENT							
	<u> 1962</u>	1968	1971	1975	1980 *			
CARTERET	10.9%	6.5%	5.9%	7.0%	6.3 %			
CRAVEN	5.2	3.7	5.1	6.6	4.7			
DUPLIN	5.6	3.8	4.3	10.5	7.8			
GREEN	8.7	6.1	8.0	7.6	5.0			
JONES	6.1	3.2	8.5	7.8	9.7			
LENOIR	6.6	5.0	4.9	7.1	6.6			
ONSLOW	7.1	5.3	5.6	7.1	8.2			
PAMLICO	, 9. I	6.2	8.6	11.1	6.7			
WAYNE	6.1	4.1	4.1	8.3	6.7			
REGION	6.9	4.6	5.1	8.1	_			

SOURCE: North Carolina Employment Security Commission
**September, 1980

E/ 4

Onslow County's unemployment rate is inflated somewhat due to the large number of marines discharged each month at Camp Lejeune.

To reduce Onslow's unemployment the civilian job market must continue to expand. Industrial parks now on the drawing board must become a reality. These parks will not only create jobs for people who work in them but will also expand the commerce of the entire county through new businesses and construction.

TABLE 12
ESTIMATED EMPLOYMENT BY INDUSTRIAL BREAKDOWN FOR 1975, 1979, 1990, 2000 FOR ONSLOW COUNTY

	<u> 1975</u>	1979	1990	2000
TOTAL		24,099	28,155	32,450
AGRICULTURE	990	728	400	236
NONAGRICULTURE	21,720	23,371	27,755	32,214
	1,830			3,851
CONSTRUCTION	950	1,303	1,547	1,796
TRADES & SERVICE	6,340	7, 36 I	8,742	10,146
TRANSPORTATION, COMMUNI	CATION.			
TRANSPORTATION, COMMUNI	920	1,001	1,189	1,380
GOVERNMENT			9,249	
ALL OTHER NON-MANUFACT	URING. 2,840	3,124	3,710	4.306

SOURCE: N. C. Employment Security Commission
Onslow County Planning Department

These are straight line projections and do not take into account reductions of employment in any field. They may, however, give an idea of the direction employment is going.

Income levels in Onslow County continue to lag behind most of the counties in Region P. Out of nine counties, Onslow ranks seventh in per capita income and fourth in median family income. These figures are 1978 estimates and may change when the 1980 figures from the Bureau of Census are released.

TABLE 13
RESIDENT INCOME LEVELS FOR REGION P, NORTH CAROLINA & THE U.S., FOR 1978

	1978 PER CAPITA	1978 MEDIAN FAMILY
	INCOME	INCOME
CARTERET	<i></i> \$ 5,939	\$ 13,000
CRAVEN DUPLIN		
GREEN JONES	7,116	10,000
LENOIR	6,331	12,700
ONSLOWPAMLICO WAYNE	5,339	10,400
WAYNE	5,961	
NORTH CAROLINA	6,640	. —
UNITED STATES	7,840	_

SOURCE: 3 % U.S. DEPARMENT OF COMMERCE ESTIMATES

TABLE 14
1975 AND 1980 ANNUAL PAYROLL

	1975 Est. Payrol1	1980 Est. Payroll	% Increase
1. Camp Lejeune	\$244,000,000	\$355,000,000	45%
2. Industry	22,000,000	32,000,000	45%
3. Agriculture	20,000,000	28,000,000	40%
4. Tourism	12,000,000	26,000,000	117%
5. Seafood Industry	8,000,000	13,000,000	63%

SOURCE: Onslow County Economic Development Commission

As revealed by the data, Camp Lejeune is by far the largest employer in Onslow County. The largest jump percentage-wise is the county's growing tourism industry.

Retail Sales

A good example of a healthy economy is one that has a continous rise in retail sales.

TABLE 15
RETAIL SALES IN JACKSONVILLE & ONSLOW COUNTY-1969-1979

		9	GOF TOTAL ONSLOW		
YEAR	JACKSONVILLE	%INCREASE	COUNTY SALES	ONSLOW COUNTY	%INCREASE
1969	\$ 97,936,087	·	78 %	\$ 126,492,600	_
1970	105,980,116	8%		138,717,657	10%
1971	108,640,669	3 %	73%	147, 325, 204	6%
1972	12 2,544,924	13%	74%	167, 139, 528	13 %
1973	140,476,403	15 %	73%	194,066,574	16%
1974	149,622,399	7%	70%	213,290,728	10%
1975	160,133,124	7 %	69%	232,299,799	8 %
1976	176,974,662	12%	69 %	261,858,203	13%
1977	196,284,346	10 %	69%	285,192,011	9 %
978	210,103,409	7%	67%	311,938,794	9 %
979	224,459,502	7 %	66 %	337,755,974	8%
SOURCE	ONSLOW COU	NTY ECONOMIC	DEVELOPMENT	COMMISSION, DECE	MBER, 1980

As shown by the previous table, Onslow County's retail sales have grown steadily, highlighted by a 16% increase between 1972 and 1973. Over the entire decade retail sales increased 143%.

Jacksonville's portion of Onslow County's retail sales dipped gradually, showing a trend to locate retail establishments outside the city limits. What began the decade as 77% of the entire county's retail sales dropped to 66% by 1979. This figure will probably jump dramatically in the early 1980's due to Jacksonville's recent annexation which included Brynn Marr Shopping Center, most of the businesses along Western Boulevard and the site for the new mall which is due to open in late 1981.

Camp Lejeune

Camp Lejeune Marine Corps Base occupies approximately 166 square miles in the southeastern portion of Onslow County, or approximately 22% of the county's land area. The base, since it is under no county or municipal jurisdiction, is controlled competely by the military.

With 33,305 military personnel stationed at Camp Lejeune and living on base, plus throughout the county and neighboring counties, the economic impact is very broad and far-reaching. In 1980, 22,549 dependents of military personnel also lived in or near Onslow County. Over 4,000 civil service workers from a multi-county area commuted to Camp Lejeune daily to work. Over 1,500 non-civil service workers communted to work daily on various base construction projects at the base. With an annual payroll now exceeding \$355 million, the effect of Camp Lejeune on the entire region is obvious. It is estimated that the government spent \$60 million for goods and services at Camp Lejeune in 1980, much of that locally.

Camp Lejeune is a city itself. It supplies all of its own power and community facilities. Most living requirements can be purchased directly from the commissary or the post exchange which this past year (1980) had combined retail sales of over \$67 million.

Along with the population at Camp Lejeune come many vehicles. In addition to more than 55,000 registered vehicles in Onslow County, we must plan on over 21,000 unregistered vehicles (out of state and military vehicles) to get the entire traffic picture.

A potential major asset to the county is the 300 - 400 trained personnel discharged each month from Camp Lejeune. These people are mainly a untapped resource to attract new industry into the county. Matching their skills to the interested industry will be a big job in the future.

INDUSTRY

Onslow County is just beginning to attract the 'large number of good industries it is capable of supporting. The table below gives a breakdown of industries which have moved to Onslow County.

TABLE <u>16</u>

INDUSTRIAL GROWTH IN ONSLOW COUNTY
1941 - 1980

1941 - 1965	Product Manufactured	Total Employment
Camp Lejeune Daily News Thompson Sign Co.	Newspaper Signs	82 20
1966 - 1970		
Carolina Meat Processors Weyerhaeuser Martin-Marietta Aggregates Richlands Textile, Inc. Swansboro Garment Co. Del-Mar, Inc. Maysville Fashions Barrus Construction Co.	Bacon Plywood Marl Ladies Blouses Clothing Clothing Clothing Paving	500 250 22 250 300 300 150 40
<u> 1971 - 1975</u>		· · · · · ·
Carter's Packing Co. Uniflite Holly Ridge Foods, Inc. Progressive Services Co. Alton Box Board Co.	Beef, Pork Yachts Frozen Pastries Cutting Dies Paper Tubes	20 250 30 50 100
1976 - 1980		
Stanadyne, Inc. Belle-Dream, Inc. Mine Safety Appliance Co. Atlantic Industries	Fuel Injection Equipment Lingerie Gas Masks, etc. Men's Shirts	625 100 100 100

TABLE 16

INDUSTRIAL GROWTH IN ONSLOW COUNTY 1941 - 1980

•	roduct	Total
Other Industries	Manufactured	Employment
Food Industries (total)	Seafood Processing	400

As this table shows, most new industries have moved into Onslow County since 1966. However, if Camp Lejeune is considered an industry, it is by far the largest industrial employer and probably will remain so.

The Onslow County Economic Development Commission continues to seek quality industries to move to Onslow County.

Agriculture

Agriculture has always represented a large portion of Onslow County's economy. It contains the third largest payroll among county employers (\$28 million) and supplies provide many full or part-time jobs. Richlands, White oak and Stump Sound Townships are the primary agricultural areas.

Tobacco is the largest money crop. Gross farm income from the major crops - tobacco, corn, and soygeans - has remained fairly stable as the following indicates.

TABLE 17
GROSS FARM INCOME - ONSLOW COUNTY (IN MILLIONS)

YEAR	CROP	LIVESTOCK	TOTAL INCLUDES GOVERNMENT PAYMENTS, EXCEPT 1978
1978	17.4	4.7	22.1
1977	15.7	3.0	18.8
1976	16.2	3 .6	19.8
1975	> 18.5	2.9	21.5
1974	· 16,8· · ·	2.1	19.0
1973	14.4	3.2	17.8
1972	10.5	1.4	12.3
1971	8.3	1.8	12.7
1970	10.1	1.2	16.2
1969	9.0	3.1	17.5
1968	7.8	2.5	15.1
1967	8.9	2.5	15.5
1966	8.6	2.2	14.0
1965	7.1	2.3	12.5
1964	8.7	1.5	15.2
1963	8.9	3.2	13.6
1962	7.0	3.7	11.9

SOURCE: Onslow County Community Resource Development Committee, 1962-71

North Carolina Crop & Livestock Reporting Service (1972-78)

Other farming areas showing increased income over the last years are farm forestry, greenhouse and nursery, and grains. Livestock products such as hogs, cattle, poultry and eggs have increased farming incomes also. This may fluctuate, however, as the price per pound rises and falls.

The total amount of acreage in farmland dropped over 28,000 acres from 1951 to 1978, or approximately 16%. This is a significant amount of land. However, acres of harvested cropland increased during the 1970's after slumping badly during the 1960's. This may be a sign of resurgence in the agricultural sector.

TABLE 18 CHANGES IN AGRICULTURAL ONSLOW COUNTY

YEAR	ACRES OF ALL LAND /IN FARMS A	PEOPLE ON FARM Tracts b	PEOPLE.WHO WORKED 100 DAYS OR MORE OFF FARM	ACRES OF HARVESTED CROPLAND
1978	150,000	X		42,596
1976	150,718	*	` > *	46,183
	153,380			44,147
1973	163,585	*	*	43,535
1972	•			45,548
1971			1,617	33,797
1969			1,578	
1968			1,566	36,994
1967	165,580			36,594
1966	165,469		1,651	35,356
1965	166,909		1,659	
1964		9,266		35,285
1962			1,665	
1961	173,035	10,477		46,052
1951				49,042

. A Approximately.

ract is defined as 10 acres or more. included in census. tract is

SOURCE: Dept. of Agriculture, Ons Crop Acreages, 1974-1978 North Carolina Onslow Co. Annual Land Utilization and Crop Acre U.S. Dept. of Commerce. Census of Agriculture,

The decline in farm population does not represent a decline in the importance of the agricultural sector of Onslow County's economy but rather a change in farming methods and equipment. The tenant farmer is being replaced by larger farms with larger equipment. This accounts in part for the large number of people who work 100 days or more off of the farm.

Most farms in Onslow County are family owned (86%, as compared to partnerships (10%), a family-held corporations (22%) and other types (2%). The total number of farms decreased from 871 to 740 in the 1974-1978 time frame, or a loss of 15%. This increases the size of the average farm from 67 acres in 1950 to 95 acres in 1974 to 115 acres in 1978.

Travel and Tourism

Travel and tourism expenditures increased by 43% in Onslow County between 1975 and 1979 as compared to the entire state which increased by 93%. As a result, Onslow County's share of travel and tourism expenditures statewide dropped from 1.37% to .97%.

TABLE 19
ESTIMATED TRAVEL AND TOURISM EXPENDITURES
OF SURROUNDING COUNTIES

	1975	% OF STATE TOTAL	STATEWIDE RANK	1979	% OF STATE TOTAL	STATEWIDE RANK
CARTERET	\$ 9,714,000	.89	25	\$61,653,000	2.93	10
JONES	663,000	.06	91	118,000	.01	95
DUPLIN	2,776,000	.25	63	1,498,000	.07	75
PENDER	1,622,000	.15	77	5,264,000	.25	55
CRAVEN	8,615,000	.79	34	14,213,000	.68	33
HANOVER	33,270,000	3.05	7	86,033,000	4.08	. 7
ONSLOW	\$14,983,000	1.37	15	\$20,493,000	.97	22

Source: N. C. Department of Commerce

Hammock Beach State Park is located on the coast near Swansboro and is accessible only by ferry. Attendance at the park has increased from 20,085 in 1976 to 29,029 in 1980 (45%).

Seafood Industry

The seafood industry in Onslow County has experienced a very good overall growth rate over the past several years. This is indicated by the table on the following page. The large increases from 1975 to 1979 are partially due to better reporting of catches. However, more seafood is being caught by Onslow fishermen now than in most of the recent years.

Most seafood caught by Onslow County's commercial fishermen is sent out of the county for processing. This is a weakness in the seafood industry that should be rectified by Onslow County actively seeking this type of industry.

Onslow County in 1979 ranked fifth statewide in the dockside value of seafood landings, up from sixth place in 1975 and seventh place in 1972.

Sneads Ferry and Swansboro continue to be the main ports for commercial fishermen despite the need for dredging work in the New River and White Oak areas.

TABLE 20 COMMERCIAL FISHING CATCHES 1975 & 1979

ТҮРЕ	1975 POUNDS	1979 POUNDS	1975 DOCKSIDE VALUE	1979 DOCKSIDE VALUE
BLUEFISH	5,300	115,200	\$ 526	\$ 19,369
BUTTERFISH	ļ—	300		76
CROAKER	49,700	344,500	4,619	69,373
DRUM (BLACK)	2,000	—	138	
EELS		31,000		27,700
FLOUNDER	164,700	846,200	54,100	445,806
GROUPER	100	5,300	15,000	4,631
KING WHITING	40,800	5,400	5,757	927
MULLET	283,500	142,900	29,802	26,808
PIGFISH	300		34	
SCUP / PORGY	2,000	7,500	466	5,459
SEA BASS	12 9,400	68,400	51,807	53,477
SEA TROUT, gray	62,800	325,400	6,748	69,312
SEA TROUT, spotted	. 15,600		5,648	
SHEEPSHEAD	200		9	
SNAPPER	5,800	28,900	3,857	43,578
SPANISH MACKERAL	3,400		503	
SPOT	98,800	186,900	11,520	38,304
STRIPED BASS		4,200		3,591
CRABS, BLUE, HARD	160,400	291,100	18,939	48,335
SHRIMP	597,100	724,500	546,297	1,295,415
CLAMS	113,300	261,400	88,729	774,211
OYSTERS, PUBLIC, SPRING	7,700	24,000	5,978	38,572
OYSTERS, PUBLIC, FALL	4,600	50,400	3,888	86,549
OYSTERS, PRIVATE, SPRING	3,300	4,100	2,562	6,905
OYSTERS, PRIVATE, FALL		4,900		8,479
SQUID	2,100	200	287	59
TOTAL	1,752,900	3,472,700	\$ 842,229	\$ 3,066,936

SOURCE: N.C. DIVISION OF MARINE FISHERIES

EXISTING LAND USE

Approximately 4% of the land in Onslow County is developed (used for commercial, residential, industrial or recreational purposes). The remainder of the county is divided among Camp Lejeune Marine Corps Base - 22%, Hofmann Forest - 11%, privately owned forest land - 42%, agricultural - 13%, and water and marsh - 8%.

Total farm land is declining at a very gradual pace with farms being combined or used for purposes other than farming.

Most of the forest land is owned by commercial foresters such as Weyerhauser and International Paper.

Hofmann Forest is owned by North Carolina State University and contains agricultural as well as forest lands. It is not available for development.

According to the Neuse River Council of Governments, in 1979 Onslow County contained 29,996 housing units, of which 3,133 were substandard (11%). This includes mobile homes and base single family housing. Residential use is densely developed around Jacksonville. This is especially true in the Southwest community, along Piney Green Road, along Gum Branch Road, and in other areas such as the Sneads Ferry community, the Queen's Creek area and along U. S. 258. Second home development at West Onslow-Beach has attracted many people since 1965. A recent survey of that area showed that permanent residents owned less than 7% of the total housing stock. Many of these homes are mobile homes. However, condominiums are being sold more recently at a faster pace than ever before. Approximately 60 were built and sold in 1980, signaling a new trend in building.

New subdivisions have been minimal since the adoption of county subdivision regulations in 1979. This is due to exemptions granted to 25 new subdivisions which were in the planning stage when the ordinance was passed. New projects and plans are now filtering in at a faster pace, possibly due to developers looking for newer sites and due to falling rates of interest.

Industry is located mainly in and around Jacksonville, although there is some industry elsewhere in the county (Uniflite - near Swansboro, Carolina Meat Processors - Holly Ridge, Richlands Textile - Richlands).

Commercial areas are located mostly within municipal boundaries. However, strip commercial development has occurred in large amounts along U. S. 17, U. S. 258 and N. C. 24 near Jacksonville and along N. C. 24 near Swansboro. These are the heaviest traveled traffic arteries in Onslow County.

Water and marsh cover 8% of the total acreage of Onslow County. Approximately 26 miles of oceanfront also is in the county. Of this total, 11 miles are in Camp Lejeune, 12 miles are in Onslow County's jurisdiction (West Onslow Beach), and 3 miles are in Hammock Beach State Park. West Onslow Beach fronts on 13 miles of the Atlantic Intracoastal Waterway on its mainland side and also possesses the greatest flexibility for civilian access to the ocean.

West Onslow Beach is part of Topsail Island, one of the many barrier islands along the North Carolina coastline. It is subject to tremendous development pressures and will likely experience many land use changes in the next decade. It is for this reason that Onslow County government is seeking land at West Onslow Beach to provide for future public access. A \$56,000 grant application has been made to the Heritage Conservation and Recreation Service to develop 7 acres the county already owns. Other potential park sites on the northeast end of the beach are also being reviewed. A Beach Access Study, conducted by John J. Hooten and Associates in 1979, is being implemented on a gradual basis. In addition, the Onslow County Subdivision Regulations require the dedication of a public pedestrian easement for each 600 feet of oceanfront subdivision.

Using data from the 1976 Land Use Plan supplemented by a windshield survey, an existing land use inventory has been conducted. The results are as follows:

TABLE 21 EXISTING LAND USES-WEST ONSLOW BEACH

USE	1976 ACREAGE	% OF TOTAL	1981 ACREAGE	% OF TOTAL
RESIDENTIAL	155.2	4.7	216.4	6.6
COMMERCIAL	26.0	0.7	36.9	1.1
UNDEVELOPED B T	749.0	22.7	676.9	20.7
WETLANDS	1,788.5	54.4	1,788.5	54.4
BEACHES	564.3	17.2	564.3	17.2
	3,283.0	100.0%	3,283.0	100.0%

Churches and schools are dispersed throughout the county occupying only a small percentage of the total acreage.

Onslow County has 15% of its land area used for agricultural pursuits. This figure does not include the commercial forest lands. Farm land is predominant in the Richlands area, the White Oak area, the Sneads Ferry area and scattered throughout the remainder of the county.

TABLE 22 1981 EXISTING LAND USES ONSLOW COUNTY

	ACREAGE	%
AGRICULTURE (CULTIVATED)	42,596	8 . 80
INDUSTRY	600	< 1
COMMERCIAL FORESTRY	. 113,726	23.51
CAMP LEJEUNE	108,480	22.42
INCORPORATED AREAS	8,095	1.67
HOFMANN FOREST		11.10
COMMERCIAL	561	< 1
RESIDENTIAL	6,170	1.28
WATER & MARSH	36,864	7.62
PRIVATE & OTHER FORESTS	96,002	19.84
RECREATION LAND (PUBLIC)	1,050	🗸 I
URBAN & RURAL NON-FARM	16,000	3.31
1	483,840	100%

Sources:

Agriculture: Land Utilization and Crop Report of Onslow County

Industry: Economic Development Commission

Camp Lejeune: Onslow County Statistical Summary 1968 .

Forest Private: Forest Statistics for Southern Coastal Plains

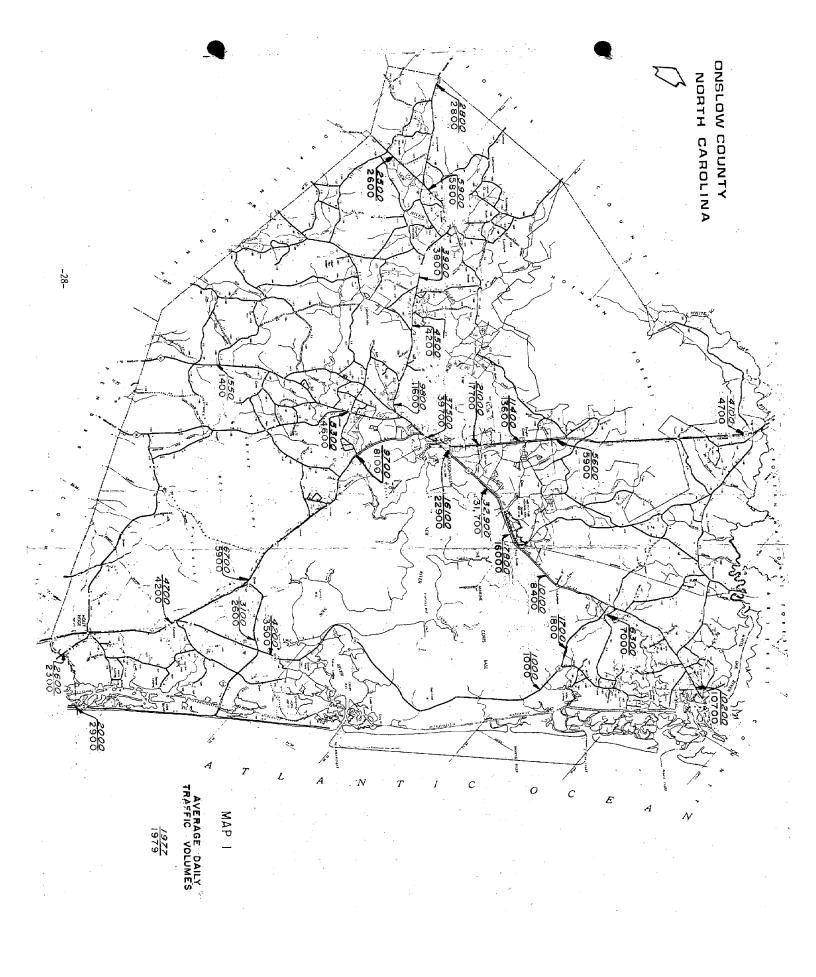
Other Forest: U.S. Forest Service

Significant Land Use Compatibility Problems and Unplanned Development

A large number of land use compatibility problems exist today in Onslow County and there is potential for many more. Strip commercial development along U. S. 17, U. S. 258 and N. C. 24 contributes to traffic problems daily, especially during the morning and evening "rush hours". This problem is compounded by the intermingling of residential property along these traffic arteries. With this strip development occurring, speed limits become reduced, turning traffic becomes a problem, and the utility of the highways is decreased. County subdivision regulations adopted in 1979 will help cut down on strip residential development. Zoning could help control strip commercial development but zoning is implemented by the county only at West Onslow Beach. Overall traffic volumes, as shown on the map on the next page, have been increasing along major arteries within several miles of the city of Jacksonville while decreasing the farther one travels away from Jacksonville. This suggests that traffic problems related to strip development near Jacksonville will continue to increase unless appropriate measures are taken.

The presence of firm regulations, as prescribed by the Coastal Resources Commission, related to building in estuarine and ocean erodible areas has proven to be a great help to each entity. Homes are set back properly and estuaries are protected. However, the lack of clear-cut regulations in inlet hazard areas could create problems in the future. Scientific data related to the migration of each inlet along the coast should be used to determine the type and density of future development in these areas.

The problem with malfunctioning septic tanks in poor soils has caused additional problems to develop. Along the coast they have been one of the culprits in polluting valable shellfish areas. Their odor also creates problems for the property owner as well as neighbors. The amended septic tank regulations which came into effect in 1977 (Laws and Rules for Ground Absorption Sewage Disposal Systems of 3,000 Gallons on Less Design Capacity)



have prevented many of these types of failures from occurring on newly developed lots. In older subdivisions, adequate land may not be available for the installation of a second or third system. This may put pressure on municipalities and the county to service these areas, causing random extension of utilities and increasing the possibilities of urban sprawl.

Land use problems that have been corrected to some degree are the need for good water in many areas and the need for adequate public access at West Onslow Beach. The county water system, now under construction, will provide water to many residents who had poor water previously due to a number of reasons (shallow wells, heavy mineral content, etc.). As for beach access, all new subdivisions at West Onslow Beach shall provide at least one 10 foot pedestrian easement for each 600 feet of ocean frontage. The easements will be dedicated to Onslow County. Onslow County is also working on two potential park sites at the beach in its ongoing effort to provide public access.

Potential problems which may create some concern in the future should also be reviewed. Development around airports has created difficult situations in many localities across the country. In preparation for what may happen around Albert J. Ellis Airport in Onslow County, the county is undertaking a Land Use and Noise Analysis with the help of the Federal Aviation Administration. This study will make recommendations as to how Onslow County can effectively deal with any new development in the vicinity of the airport.

Development pressure on the ecosystem of Onslow County should also be monitored closely (see Environmental Effects of Potential Development Activities in Coastal Onslow County, 1980).

As development spreads to areas that were previously used for other purposes compatibility problems could occur between urban uses and rural farm operations. Stricter land use regulations should be considered if this type of conflict continues to occur.

Development pressures will continue to be great at West Onslow Beach. To serve this future development, a "201" Facilities Plan was designed

have prevented many of these types of failures from occurring on newly developed lots. In older subdivisions, adequate land may not be available for the installation of a second or third system. This may put pressure on municipalities and the county to service these areas, causing random extension of utilities and increasing the possibilities of urban sprawl.

Land use problems that have been corrected to some degree are the need for good water in many areas and the need for adequate public access at West Onslow Beach. The county water system, now under construction, will provide water to many residents who had poor water previously due to a number of reasons (shallow wells, heavy mineral content, etc.). As for beach access, all new subdivisions at West Onslow Beach shall provide at least one 10 foot pedestrian easement for each 600 feet of ocean frontage. The easements will be dedicated to Onslow County. Onslow County is also working on two potential park sites at the beach in its ongoing effort to provide public access.

Potential problems which may create some concern in the future should also be reviewed. Development around airports has created difficult situations in many localities across the country. In preparation for what may happen around Albert J. Ellis Airport in Onslow County, the county is undertaking a Land Use and Noise Analysis with the help of the Federal Aviation Administration. This study will make recommendations as to how Onslow County can effectively deal with any new development in the vicinity of the airport.

Development pressure on the ecosystem of Onslow County should also be monitored closely (see Environmental Effects of Potential Development Activities in Coastal Onslow County, 1980).

As development spreads to areas that were previously used for other purposes compatibility problems could occur between urban uses and rural farm operations. Stricter land use regulations should be considered if this type of conflict continues to occur.

Development pressures will continue to be great at West Onslow Beach. To serve this future development, a "201" Facilities Plan was designed (also serving Surf City, Topsail Beach, and a small part of Pender County) with Onslow County serving as the lead agency. The planning area had a 1980 permanent population of 820 and a peak seasonal population of 19,950 (1980 estimate). None of the planning area is presently served by a central sewer system.

Several scientific studies have revealed that significant water quality problems exist in this 201 area, mostly related to septic tank seepage, rapid percolation and a high water table. This situation has resulted in the closure of large areas to shellfishing.

With a great deal of growth projected for West Onslow Beach (see Seasonal Population), the degredation of ground and surface waters will continue. With the regional wastewater management system designed by Henry Von Oesen and Associates, Inc. at a cost of approximately \$15 million (1979 dollars), water quality will greatly improve.

This project, along with others, is being delayed by the U. S. Environmental Protection Agency which is reviewing its impact on the barrier island. With or withour implementing this 201 plan, development will continue to occur, even in high densities. See the North Topsail Shores development at New River Inlet as a good example because on-site waste disposal was used. The only effective long term answer for existing and future homes, however, is implementing this 201 plan and, thus, preserving water quality.

Areas Likely to Experience Change in Predominant Land Uses.

A few areas of Onslow County stand out as most likely to experience change in predominant land uses. They include: undeveloped portions of West Onslow Beach; areas adjacent to U. S. 258 from Jacksonville to the Airport Road (SR 1001); land in the vicinity of Albert J. Ellis Airport; areas adjacent to Gum Branch Road (SR 1308) from Jacksonville toward Richlands for a distance of approximately five miles; land adjacent to and in the vicinity of Piney Green Road; the Southwest community; land just south and north of Richlands; and land adjacent to or near N. C. 24 west of

of Swansboro. With the beach as an exception, this land is presently in timber or is used for farming.

PHYSICAL LIMITATIONS FOR DEVELOPMENT

High water table, especially in the eastern portions of Onslow County, makes the use of land difficult at times. Level terrain offers builders little help in efforts to drain water away from development sites. Some drainage work has taken place along the coast to make property usable and control mosquitos. However, adverse side effects have taken place or could take place in many instances, such as: causing an influx of fresh water into salt water estuaries, stunting the growth of species that live there; or allowing pesticides and fertilizers to flow with the fresh water into nursery areas, causing eutrophication, siltation and poisoning of those areas.

Hazard Areas

Flood hazard is something many coastal communities must deal with. In addition to Jacksonville and Swansboro being located adjacent to large bodies of water, the Queen's Creek area plus Sneads Ferry and West Onslow Beach are communities that must contend with flooding in the future.

At the present time Onslow County is in the emergency phase of the Federal Flood Insurance Program. Existing preliminary maps are not accurate enough to be very useful. They also do not show flood elevations. Final maps, produced under the supervision of the U.S. Army Corps of Engineers, will be available in 1982. The impact of these flood hazard areas on future development can be better assessed when these maps are available.

Shoreline erosion data, prepared by the Office of Coastal Management, shows that the oceanfront of Onslow County is eroding at a very gradual pace when compared to many other counties and municipalities. The thirty year long-term annual erosion rates vary from 60 to 76 feet. These figures are averages, however, and should not hide the potential dangers of building on the oceanfront.

At West Onslow Beach a problem has developed whereby property owners have had land rendered unbuilable because of CAMA setbacks from the ocean and/or zoning setbacks from roads. A policy has been adopted by the state to allow some types of development on this land. However, the value of the property in many cases has been lessened. Onslow County should adopt a policy of lowering the value of the property somewhat for tax purposes if a variance is not justified or a reasonable use cannot be made of the property.

The only inlet subject to development pressures is New River Inlet. The inlet is presently migrating southwest, creating a "spit" (a finger of land projecting partially across the mouth of 'the inlet) on the Camp Lejeune side of the inlet. Although no existing scientific data is available to prove it, local property owners feel the present dredging practices in the inlet are accentuating erosion on the southwest side which, according to recent estimates, may reach more than 20 feet per year. Several alternatives are available; (1) limit development in this hazardous area; (2) allow stabilization procedures to be implemented along eroding portions of the inlets shoreline; or (3) dredge the inlet in a manner which will not accentuate erosion on the southwest shore (if the existing dredging is indeed a problem).

The only other area of Onslow County that appears to have an erosion problem is part of the shoreline along the New River in Camp Lejeune. Cliffs 10-20 feet high have formed due mainly to wave action against the sandy loamy shoreline.

Soil Limitations

Onslow County contains three different soil groups with distinct horizons, or layers. The first group includes the Norfolk, St. Lucie, and Lakewood soils. These soils are probably the most thoroughly weathered and best drained soils in the entire county. The next group is the Dunbar, Coxville, Bladen soils. They have 3 distinct horizons: (1) a gray to dark gray surface layer; (2) a light gray to yellowish-gray subsurface; and (3) a tough, mottled and sometimes plastic subsoil layer. Because of this plastic subsoil layer, drainage in this group is often poor.

-33-

The last group is the St. Johns, Onslow, and Leon group. These soils are characterized by a distinct "hardpan" layer of blackish-brown sand cemented together by organic matter. This hardpan results in poor drainage. (See Environmental Effects of Potential Development Activities in Coastal Onslow County).

Onslow County's soil survey is being done by the U. S. Soil Conservation Service. However, it is not scheduled for completion until 1983. The importance of building on good soil cannot be stressed enough. Building foundations on soils that lack strength or have shrink-swell potential can cause cracks or major structural damage.

The location of sanitation systems on individual lots is greatly affected by soil types. The North Carolina Administrative Code, Section .1900, is very specific about soil characteristics suitable for placement of sewage disposal systems. Each building lot is inspected by a county sanitarian and soil borings are made. The soil texture, structure, depth and drainage are assessed in determining suitability. Poor soil types for buildings and septic systems are not limited to one area of the county but are scattered throughout. Hardpan is also a problem in many areas, especially in and around Holly Ridge, Dixon and Hubert. High water table cannot be narrowed to any one area of Onslow County either. As an example, many sandy soils have no problem but many loamy soils have a dark gray color indicating a water table problem. These two soil types occur in every township. In general, the best soil types that have the least number of complications tend to be in Richlands and Swansboro Townships.

Modified septic systems are being used more in Onslow County as they are across the state. They are installed to overcome specific handicaps, with high water table the main problem.

Soil types that show the greatest hazard for building are in the severe category: Portsmouth - Torhunta, Johnston Bibbs, and Ponzer -- Pamlico soils.

In addition to the severe limitations category, the poorly drained soils of the county include the moderate limitations category. This category includes the soils of the Craven-Lenior, Tidal Marsh, Coastal Beach, Rains Lynchburg-Goldsboro, Leo-Lynnhaven and Onslow-Lumbee types.

The following are Onslow County areas, their soil classification, and relationship to septic systems.

Swansboro Township

Majority area: Onslow-Lumbee, Leon-Lynnhaven, Coastal Beach (Moderate Limitations), Tidal Marsh (Severe Limitations) small area north of Queens Creek, Johnston-Bibb (Severe Limitations) small area at Bear Creek, and Ponzer-Pamlico (Severe Limitations).

White Oak Township

Majority area: Craven-Lenior and Onslow (Moderate Limitations)
north boundary and central portions, and Johnston-Bibb (Severe Limitations)
Sneads Ferry

Leon-Lynnhaven, Onslow-Lumbee, Coastal Beach (Moderate Limitations), Kenansville-Dragston (No Severe Limitations); Low marsh areas, Johnston-Bill; (Central and North Central Area Severe Limitations).

Stump Sound

Central area: Ponzer-Pamlico (Severe Limitations) includes low swamp areas, Kenansville-Dragston: (No Severe Limitations).

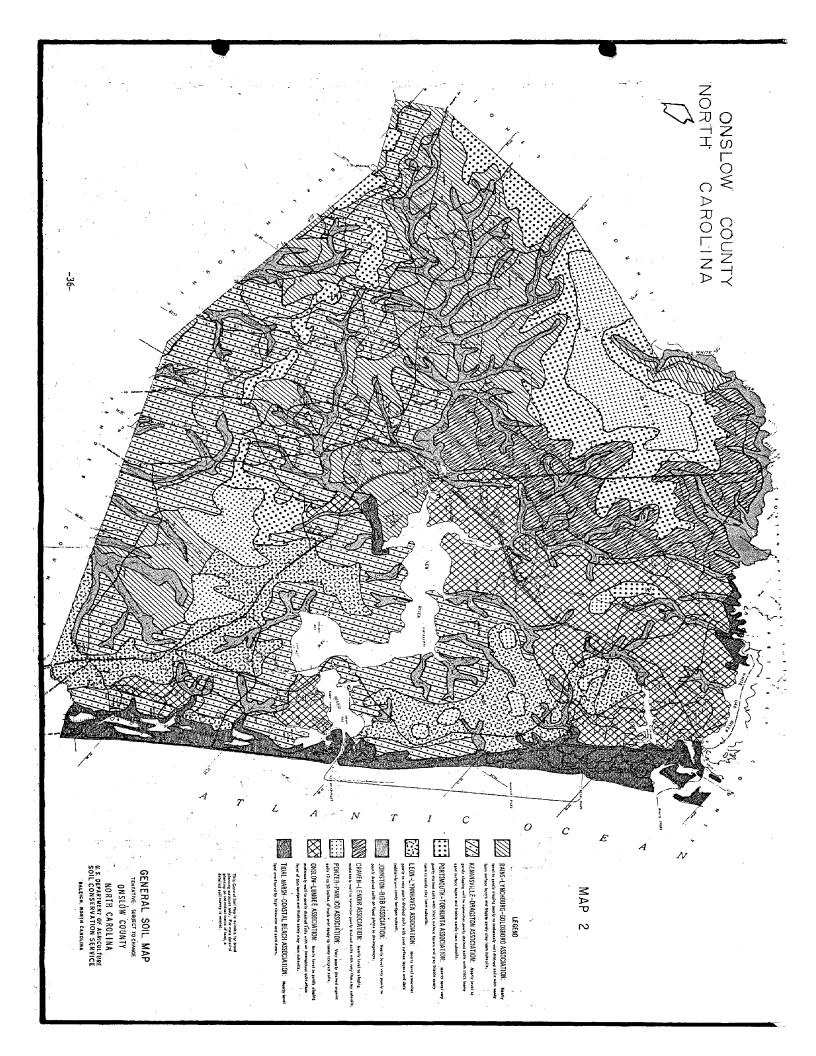
Richlands Area

Majority area: Rains Lynchburg Goldsboro (No Severe Limitations), Airport area; Kenansville, Dragston (Slight Limitations); Intermingled areas, Johnston-Bibb (Severe Limitations) and Kenansville-Dragston (Slight Limitations).

The generalized soil map along with the limitations chart provide a ready reference to soils in Onslow County; however, for more specific detail, the Soil Surver, of Onslow County, North Carolina, prepared by the U.S. Department of Agriculture, Bureau of Soils, 1923, should be consulted. This report is available through the Onslow County Farm Agent's Office on College Street.

Airport Hazard

It is important that Albert J. Ellis Airport can maintain or expand its size and level of operations to satisfy aviation needs. The protection of the public investment in a facility for which there may be no future replacement should also be considered. Equally important are those people



who live, work or own property near the airport and their freedom from noise and other adverse impacts of the airport.

With a small amount of development encroaching into the vicinity of the airport, the time is right to review alternatives which would protect both the airport and its neighbors. A planning group has been organized to conduct a Land Use and Noise Compatibility Study for the airport.

Members of the group include the County Planning Director, Airport Manager, Airport Engineers, members of the County Planning Board and Airport Commission, members of the aviation community, and other interested parties.

The study will indicate potential problems and will recommend measures that the county, the airport, pilots and local residents may take to prevent future compatibility problems between the airport and its environs from occurring. It is due for completion in December 1981.

Steep Slopes

With the exception of coastal sand dunes, steep slopes are not a problem in Onslow County.

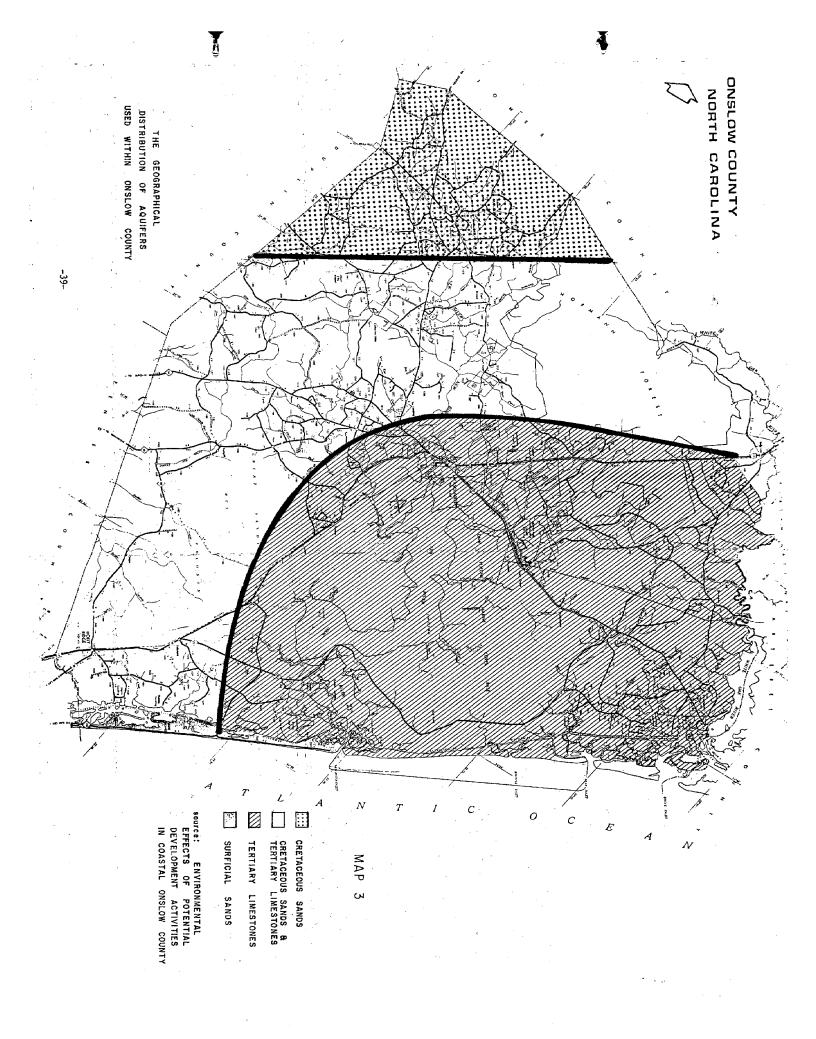
Water Supply and Quality

All of the water approved for human consumption in Onslow County comes from groundwater. Wells in Onslow County obtain their water from three aquifers – the surficial sands, the Peede (Cretaceous Sands); and the Castle Hayne formation (tertiary limestone). Surficial sand covers the entire county to depths ranging from 10 to 30 feet. This layer supplies enough water for domestic purposes since the water table is within 15 feet of the surface countywide. The Peedee formation supplies well water in the northwest portion of the county. The Peedee's yield is shown by a well of the town of Richlands which is 535 feet deep and yields 500 GPM at a drawdown of about 80 feet. Except in the northwestern portion of the county, salty water may be found in the lower part of the Peedee aquifer. The entire formation may contain salt water in the New River vicinity and south of Jacksonville.

The Castle Hayne aquifer (or tertiary limestone unit) supplies water to drilled wells south of U.S. 17. It thins out to the north but remains an important aquifer as far as Richlands. Much of the groundwater from this aquifer is discharged into the New River or in the Catherine Lake Vicinity. It's degree of consolidation and it's composition may vary greatly and open-end wells can be used almost everywhere. Permeability also varies with location.

The surficial sands yield water that is soft and low in dissolved mineral matter. It usually contains dissolved carbon dioxide to render it corrosive. Peedee water is a soft, sodium bicarbonate generally suited to all uses. The tertiary limestone aquifer yields a hard, calcium bicarbonate and may contain high levels of iron.

Problems occur on Topsail Island with the intrusion of brackish water into well water. To alleviate this problem, Onslow County has included the beach area in its county water system. With the construction of a new water line to serve North Topsail Shores, the county water system will serve the entire Onslow County portion of Topsail Island.



As stated in Environmental Effects of Potential Development

Activities in Coastal Onslow County, the use of water should be monitored closely. The tertiary limestone aquifer can provide 100,000 to 1,000,000 gallons per day over an area of one square mile. The cretaceous and sand aquifer can provide an estimated 50,000 gallons per day of groundwater.

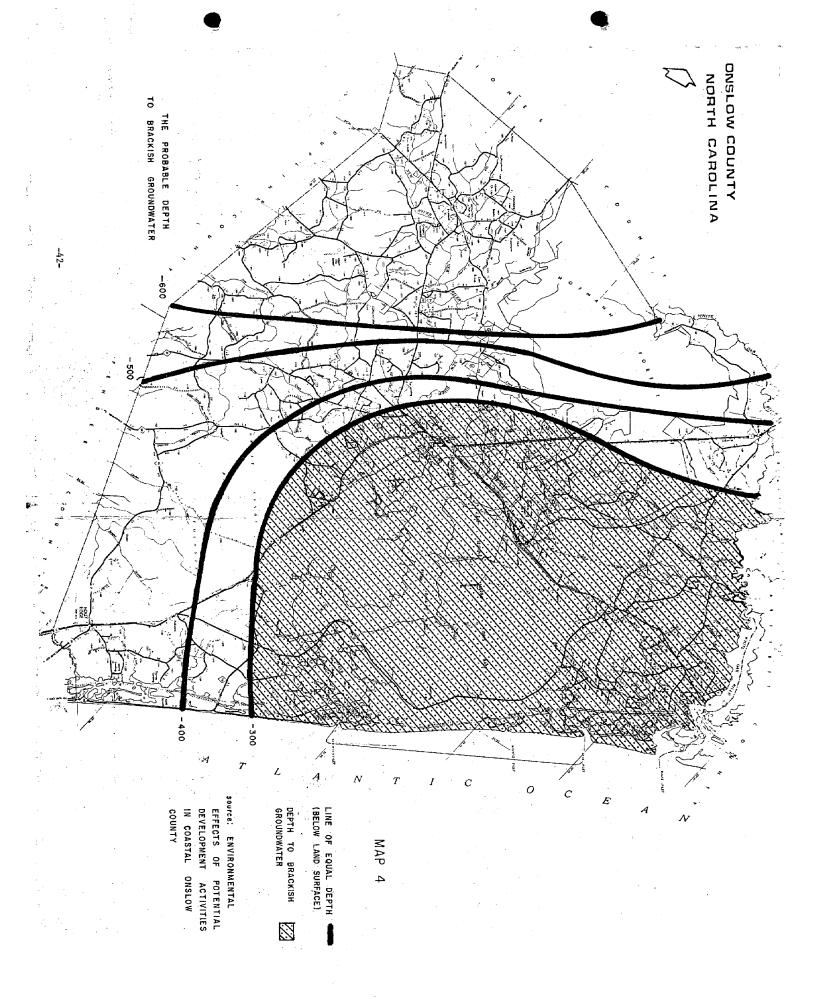
With one-half of this aquifer being brackish, it can still supply 15,000,000 GPD (assuming an area of 300 square miles and a rate of discharge equal to the rate of recharge, not including possible induced recharges).

Since wells are usually concentrated in one area, the possibility that withdrawals will be in excess of natural recharge is a possibility. This results in continually expanded cones of depression. Since well fields of Onslow County and Jacksonville are in the same general area, the levels of withdrawal should not exceed recharge. Consequences could be the lateral or even vertical movement of brackish water into fresh water. Therefore, Onslow County and Jacksonville should work closely together to prevent this type of problem.

There are two categories of pollutants: point and non-point. Point sources, like sewage treatment plant discharges, are controlled by state and federal agencies and must conform to strict emission standards. With the help of recently completed 201 projects in Jacksonville and Swansboro, treated wastewater discharge from these two towns has improved. This cannot be said for Holly Ridge which has a malfunctionion sewage treatment plant and raw sewage being dumped into storm drains which lead to Kings Creek and eventually, the Atlantic Intracoastal Waterway. Studies done by Marine Fisheries indicate that high coliform bacteria counts along the waterway can be partially attributed to the pollution of Kings Creek. Plans for a new sewage treatment and collection facility at Holly Ridge should continue. Recent tests by UNC - Wilmington indicate that points of discharge by Camp Lejeune into New River have very low coliform bacteria counts, indicating a high degree of treatment. Non-point sources, like urban and agricultural runoff, continue to be a cause of polluting our rivers and streams. Little can be done by Onslow County to alleviate this problem other than to notify the appropriate state of federal agency if a problem is detected. Due to a high water table, water quality in the vicinity of all landfills in Onslow County should be monitored closely by the appropriate state and federal agencies. -40Septic tank seepage into estuarine waters is widespread along the coast. This situation, along with runoff from livestock areas and urban developments, has created high coliform bacteria counts along the Atlantic Intracoastal Waterway and in many parts of the New River. This is substantiated by recent findings of Marine Fisheries and UNC - Wilmington Possible solutions may include some form of central sewage collection and treatment for developing areas such as Sneads Ferry and West Onslow Beach. The Topsail Island 201 Facilities Plan presently includes the developed portion of West Onslow Beach. Further design and construction of the project has been delayed while the U. S. Environmental Protection Agency conducts a new environmental impact study of 201 programs on barrier islands. The problem continues to get worse, more shellfish acreage is exposed to pollution, the cost of the project continues to rise, and funding for the project is jeaparized. EPA should release funds for this project immediately.

Pesticides and nutrients are used extensively in agriculture and may, depending on conditions, be transported into streams. Pesticides are poisonous and can kill valuable organisms in these streams. Nutrients from fertilizers have the potential to speed up eutrophication and the growth of algae which depletes oxygen supplies.

Nearly 80% of annual soil erosion in North Carolina comes from agricultural land. Some of this is discharged into large rivers as sediment, adversely affecting aquatic life and reducing the carrying capacity of the water bodies. This may be one of several problems the White Oak River has been experiencing for some time. Other problems are also being reviewed at this time in phase one of a hydrology study of the river.



FRAGILE AREAS

There are a number of fragile areas throughout Onslow County which could easily be damaged by insensitive land development.

These areas include coastal wetlands, sand dunes, ocean beaches and shorelines, estuarine waters, public trust waters, complex natural areas and archeological sites.

Coastal wetlands are defined as any salt marsh or other marsh subject to regular or occasional flooding by tides, including wind tides (whether or not the tide waters reach the marshland areas through natural or artificial watercourses), provided this shall not include hurricane or tropical storm tides. Salt marsh or other marsh shall be those areas upon which grow some, but not neccessarily all, of the following salt marsh and marsh species: Smooth or Salt Water Cordgrass (Spartina alterniflora): Black Needlerush (Juncus roemerianus); Glasswort (Salicornia spp.); Salt - Meadow Grass (Spartina Patens); Sea Lavender (Limonium spp.); Bulrush (Scirpus spp.); Saw Grass (Cladium Jamaicense; and Salt Weed Grass (Spartina cynosuroides). Included in this definition of wetlands is "any contiguous land as the Secretary... of NRCD reasonably deems necessary to affect by any such order in carrying out the purposes of this Section." (G.S. 113-230(a)). Also see the Topsail-Surf City 201 Facilities Plan for other relevant data.

Onslow County has jurisdiction over several large wetland areas. The first extends from the Pender County line to and including a portion of wetlands along the New River not included as part of Camp Lejeune. It is also bounded on one side by Topsail Island and the other side by the mainland. Portions of other bodies of water like Beasleys Creek, Kings Creek, Mill Creek, Turkey Creek and Chadwick Bay also contain wetland areas. Much of this wetland area is accessible by road.

The second wetland area extends from the northeastern border of Camp Lejeune to the Carteret County line. It includes the following area: wetlands between the mainland and the Atlantic Ocean; wetlands along Queens Creek and its tributaries; and the White Oak River as far inland as Grants Creek. With the exception of the areas around Queens Creek and Swansboro, much of this area is inaccessible except by boat.

Vacation home developments are becoming popular in accessible areas adjacent to these wetlands and could pose a threat in the foreseeable future. Much of the wetlands along the New River between Jacksonville and Sneads Ferry is in Camp Lejeune and is underdeveloped.

These wetlands along our coast serve as a critical part of the ecosystem. Estuarine dependent species like fish and shellfish make up over 90% of the total value of North Carolina's commercial catch.

Low tidal marsh also serves as the first line of defense against shoreline erosion by dissipating wave action.

There are no known endangered species in coastal wetlands.

However, adjacent lands subject to development are known to be the habital of the red-cockaded woodpecker which is endangered. Every possible effort will be made to preserve this species.

Sand dunes are defined as ridges or mounds of wind-blown material, usually sand. They comprise a major portion of the outer banks, which includes West Onslow Beach, Onslow Beach, (Camp Lejeune), and Hammock Beach State Park. Development with inadequate design, construction or setback from the ocean may create problems with the dune's stability and increase the risk of damage to the development due to wind and water. Appropriate land uses shall be only those developments that are set back adequately from the ocean to limit the risk of damage and those additions to structures of secondary usefulness which are unattached (ex. - gazebos, walkways, decks) and do not cause irreversible damage. Development shall also be consistent with local regulations and regulations of the Office of Coastal Management.

Ocean beaches and shorelines are defined as land areas without vegetation covering and consist of unconsolidated soil material that extends landward from mean low tide to a point where any one or combination of the following occur: (1) vegetation, or (2) a distinct change in predominant soil particle size, or (3) a change inslope or elevation which alters the physiographic land form.

Sand deposits of ocean beaches and shorelines represent a dynamic zone which does not afford long-term protection for development. The nature of tidal action and the force of storms is such that they cause the beach areas to shift constantly. Littoral drift is a natural phenomenon whereby sand is removed from beaches by wave action and littoral currents and is deposited upon a different stretch of the beach; this action also shifts the line of high tide and low tide. Ocean beaches and shorelines are valuable for public and private recreation and are located within natural hazard areas. Thus, development within these dynamic zones may result in loss of property and possible loss of life.

Such areas must be preserved to the greatest extent feasible with opportunity to enjoy the physical, aesthetic, cultural and recreational qualities of the natural shorelines of the State.

Estuarine waters are defined as all water of the Atlantic Ocean within the boundary of North Carolina and all the waters of the bays, sounds, rivers and tributaries there to seaward of the dividing line between coastal fishing waters and inland fishing waters, as set forth in an agreement adopted by the Wildlife Resources Commission and the Department of Conservation and Development filed with the Secretary of State entitled "Boundary Lines, North Carolina Commercial Fishing—Inland Fishing waters, revised March 1, 1965" or as it may be subsequently revised by the Legislature.

These areas are among the most productive natural environments of North Carolina, for they not only support valuable commercial and sports fisheries, but are also utilized for commercial navigation, recreation, and aesthetic purposes. Species dependent upon estuaries, such as manhaden, shrimp, flounder, oysters and crabs make up over 90 percent of the total value of North Carolina's commercial catch, and these

species must spend all or some part of their life cycle in the estuary. The high level of commercial and sports fisheries and the aesthetic appeal of coastal North Carolina are dependent upon the protection and sustained quality of our estuarine areas. (See the next page for estuarine bodies of water),

Public trust waters are defined as all waters of the Atlantic Ocean and the lands therunder from the mean high water mark to the seaward limit of state jurisdiction, all natural bodies of water subject to measurable lunar tides and lands thereunder to the mean high water mark, all navigable natural bodies of water and lands thereunder to mean high water mark or ordinary high water mark, as the case may be, except privately owned lakes to which the public has no right of access, all waters in artificially created bodies of water in which exist significant public fishing resources or other public resources, which are accessible to the public by navigation from bodies of water in which the public has no rights of navigation, all waters in artificially created bodies of water in which the public has acquired rights by prescription, custom, usage, dedication or any other means. Included in public trust waters are areas such as waterways and lands under or flowed over by tidal waters or navigable waters, to which the public may have rights of access of public trust rights, and areas which the State of North Carolina may be authorized to preserve, conserve, or protect under Article XIV, Section 5. of the Morth Carolina Constitution.

The Belgrade quarry is considered a unique geologic formation. It has been providing high quality limestone construction material for almost a quarter century. The lakes left as a by-product of this strip mining operation provide an excellent recreational resource, for they are abundant in fresh water fish and open to public enjoyment. The Belgrade quarry is not considered a fragile area and, therefore, should not be designated as an Area of Environmental Concern.

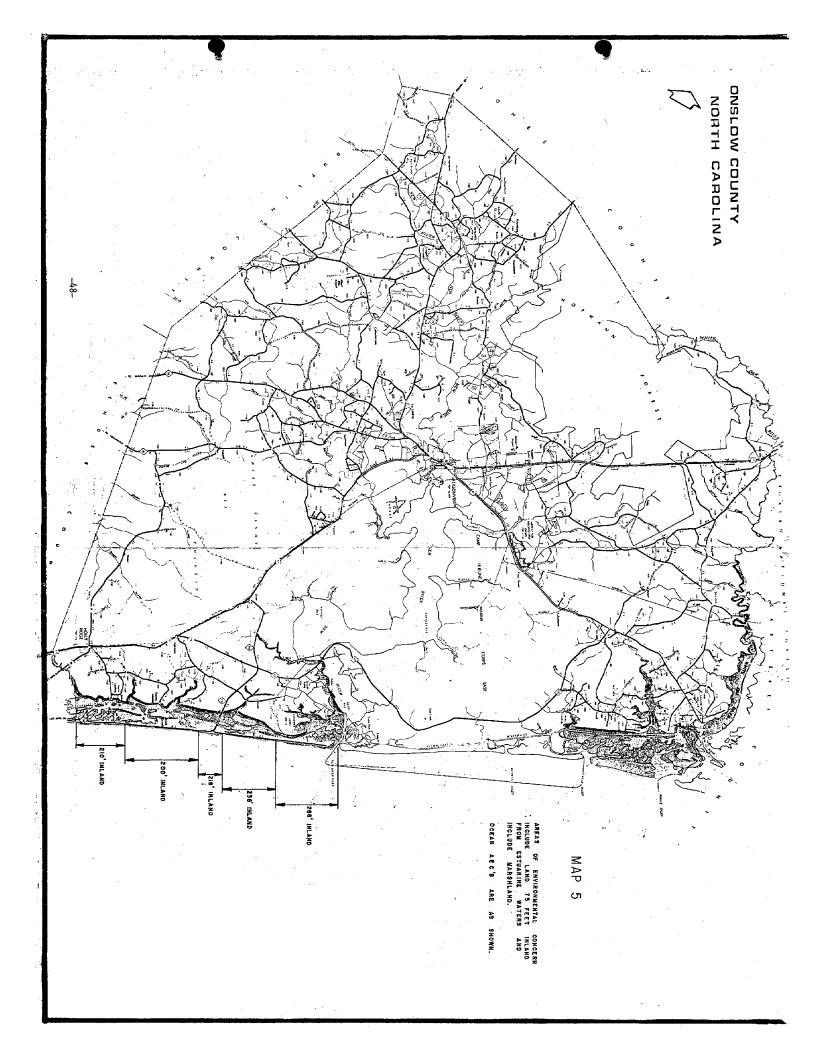
Within the county there are no known complex natural areas; that is areas sustaining remnant species, registered natural landmarks or historic sites listed in the <u>National Register of Historic Places</u>.

As noted in the <u>Onslow County Archeological Assessment</u>, there are four

TABLE 23

Many commercial fishing waters also contain nursery areas for fish and shellfish. The following is a list of all estuarine fishing waters in Onslow County.

- 1. Beasleys Creek Below the Narrows.
- 2. Kings Creek.
- 3. Turkey Creek.
- 4. Mill Creek.
- 5. New River Below U.S. 17 bridge in Jacksonville.
- 6. Wheeler Creek.
- 7. Everett Creek.
- 8. Stones Creek.
- 9. Muddy Creek.
- 10. Mill Creek.
- 11. Lewis Creek.
- 12. Southwest Creek Below Maple Hill Landing.
- 13. Freeman (Browns) Creek.
- 14. Bear Creek.
- 15. Queens Creek Below Raymond Frazier's Landing.
- 16. Parrotts Swamp.
- 17. White Oak River Below Stella.
- 18. Howard Creek.
- 19. Mill Pond Creek.
- 20. Webbs Creek Below Railroad Bridge.
- 21. New River Inlet
- 22. The Atlantic Intracoastal Waterway
- 23. Bouge Inlet



archeologically sensitive areas in the county: (1) around the White Oak River, (2) Queens Creek, (3) Chadwick Bay, and (4) Topsail Island. The previously mentioned study will be used to determine the value of any archeological sites prior to development in these areas. In addition, the N. C. Department of Cultural Resources will also be contacted for its input. For more specific information about these sites, see the Onslow County Archeological Assessment.

AREAS WITH RESOURCE POTENTIAL

Identification of areas with resource potential reflects the way in which these valuable lands are being used. This includes lands being used for forestry, agriculture and recreation, plus potential peat resources and mineral deposits.

Forestry

Most of the commercial forest land is owned by Weyerhaeuser and International Paper with several other companies owning small tracts. One unique facet of the forest industry in Onslow County is the extent of forest land ownership by commercial forestry companies. Forest land ownership maps prepared by the North Carolina Office of Forest Resources, with the approval of the major companies, indicate that approximately 37% of all the land in Onslow County is owned by these users.

Of the 494,453 acres of land in Onslow County 377,046 acres are commercial forest, 300,094 acres are covered by pines, and 76,952 acres are covered by hardwoods. The paper companies are utilizing the forests of the county well. There are 152,632 acres understocked; 129,165 acres adequately stocked and 95,249 acres of land stocked to capacity.

TABLE 24
TIMBER VOLUMES
ONSLOW COUNTY

	SAWTIMBER THOUSANDS OF BOARD FEET	GROWING STOCK THOUSANDS OF CUBIC FEET
ALL SPECIES	730,546	268,098
PINE	477,608	176,039
OTHER SOFTWOODS .	25,837	6,406
SOFT HARDWOODS .	140,971	57,523
HARD HARDWOODS .	86,110	28,130

- A. LONGLEAF LOBLOLLY, POND, SLASH, SHORTLEAF
- B CYPRESS, EASTERN RED CEDAR, ATLANTIC WHITE CEDAR
- BOXELDER, RED MAPLE, HACKBERRY, LOBLOLLY ! Y, SWEET GUM, BLACK GUM, TUPELO GUM, YELLOW POPLAR, COTTONWOOD, SYCAMORE, BLACKCHERRY, WILLOW, ELM
- BIRCH, HICHORY, PERSHMON, WECH, ASH, HOLLY, BLACK WALNUT, MULBERRY, ALL OAK
- * THIS DATA WAS IN THE 1976 LAND USE PLAN AND HAS NOT BEEN UPDATED BY THE DIV. OF POREST RECOURCES SINCE 1973.

Productive Agricultural Lands

By tradition, agricultural lands have played a major role in the county's economy. The farming regions are in the area around Richlands, within White Oak Township and, to a lesser degree, around Sneads Ferry. The big money crops are tobacco, corn and soybeans. Livestock also provides a major source of income. Adjacent to the City of Jacksonville, some prime agricultural lands are being used for urban development. In the remaining portions of the county, the total acreage of cropland in cultivation has remained relatively stable. The actual number of farms is decreasing because of a trend of larger farm owners purchasing smaller farms and combining that acreage with previous holdings The trend toward greater mechanization is partly responsible for this phenomenon. Soil information from the county soil survey is still not in published form and provides little detailed information on soil quality.

Potentially Valuable Mineral Sites

The mineral resources found in Onslow County are classed as non-metallic. Along the coast and for several miles inland the land is made up almost entirely of unconsolidated sands and clays which are of little value commercially. Inland there are several formations which are of greater value as the sands in that location are useful for construction materials, especially for road building. The limestone contains phosphate rock which makes it extremely important as a source of agriculture lime, road and airport foundation material, and aggregates for concrete and cement blocks. There is a limestone quarry at Belgrade, owned by the Martin Marietta Aggregates, that mines limestone for use in construction. The State Department of Transportation also mines paving sand for state highways from several borrow pits located throughout the county.

Seven oil and gas prospecting wells have been drilled in Onslow County, the deepest 1,570 feet, drilled in 1953; the shallowest 1,232 feet, drilled in 1960. There were eleven wells drilled in surrounding counties, (Carteret, Pender and Jones) with the deepest well in Carteret County at 5,609 feet, all of which were dry holes. Even though oil and gas have not been found, the thickness and character of the

sedimentary beds found along the coast make Onslow County interesting for further research.

Research should also be done in the Great Sandy Run Pocosin area of southern Onslow County to determine if peat is available for mining in the future. Peat is a material made up of partially decomposed plant material and inorganic minerals that have accumulated in a water-saturated environment over a period of time (also referred to as young coal). About 35,000 acres of the pocosin is owned by International Paper.

According to a recent Research Triangle Institute study, North Carolina's coastal area contains peat reserves which could supply 24 years of our state's annual energy consumption at 1976 rates. These reserves total about three billion tons of peat in coastal bogs and pocosins. In North Carolina the peat harvesting season is about nine months.

Major items of significance about peat is its potential for generating electricity and its low particulate emissions when it is burned.

Publicly Owned Lands

There are three major publicly-owned tracts within the county, the largest being the U. S. Marine Corps bases at Camp Lejeune. This federally owned land accounts for approximately 20% of the county's total land and is not open for civilian use.

Hofmann Forest, open to public recreational use, is the second largest publicly owned tract within the county. It is owned by North Carolina State University and is leased to Champion Timber Company.

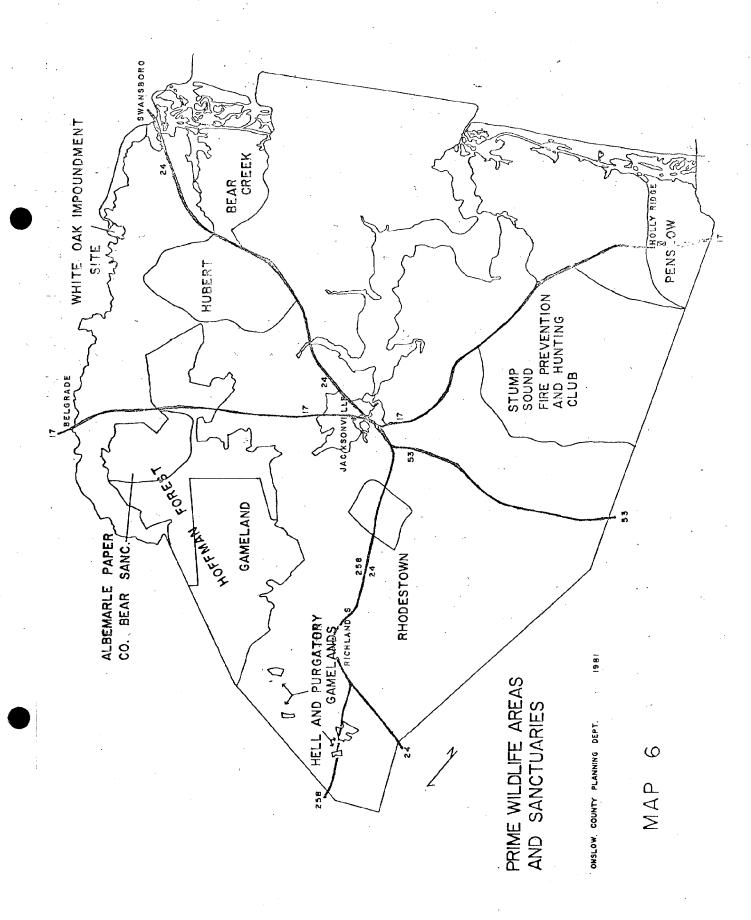
The third major publicly-owned area within the county is Hammock Beach State Park. This park is developed as open-space recreation with picnicing areas, camping areas and swimming areas provided. Access to the beach is via a passenger ferry which makes several round-trips daily. Much of the park is in its natural state.

Other Recreation Areas

At West Onslow Beach approximately 677 acres of privately owned land is undeveloped. Much of this is used by swimmers, sumbathers and fishermen. However, as with most beaches, development is gradually taking place. Onslow County plans to provide public facilities

at the beach in several ways. Plans are being formulated to develop a seven acre county park in the Seahaven area, mainly to provide parking and restroom facilities. Other sites are also being considered. Wildlife Sanctuaries

Privately owned or rented wildlife areas are shown on the following page.



FUTURE DEMANDS

Population Projections

According to recent trends, Onslow County's population will continue to increase over the next ten years but at a slower pace than in the past. Projections given by the North Carolina Department of Administration for 1980 (121,653) were extremely optimistic in relation to the preliminary estimates by the Bureau of the Census (112,165). Therefore, their 1990 projection of 124,000 should actually be less.

TABLE 25
Future Population Estimates

•	1980	1990	% Change
Onslow County	* <u>112,165</u>	120,017	<u>6%</u>
Jacksonville Twp.	58,835	61,534	5%
Jacksonville City	(22,000)	(25,000)	(14%)
Swansboro Twp.	21,840	22,714	4%
Swansboro Town	(963)	(1,011)	(5%)
Stump Sound Twp.	5,933	6,348	7%
Holly Ridge	(457)	(503)	(10%)
Richlands Twp.	8,178	8,914	9%
Richlands Town	(815)	(905)	(11%)
White Oak Twp.	17,378	20,507	18%

*U.S. Bureau of the Census
Preliminary Estimates

A major constraint to growth in many areas will continue to be poor soils which create foundation and septic tank problems. Installation of proposed sewage systems at Holly Ridge and West Onslow Beach will help alleviate this problem.

Much of the projected growth in Onslow County will continue to be in the vicinity of the City of Jacksonville. Some of this growth will be within the extraterritorial jurisdiction of the city, while other growth must be regulated by county government. Subdivision review by the Onslow County Planning Dept. will assist in developing this area at a density where septic tanks or private sewage systems can be used successfully.

An important factor to consider is the impact of the seasonal population on Onslow County's economy and public facilities. These visitors will grow in number and will demand many of the same services provided for full-time residences.

Much of the seasonal population will be located at West Onslow Beach. Listed below are population projections for that area.

TABLE 26 POPULATION PROJECTIONS FOR

WEST ONSLOW BEACH

k.	Permanent	Average Seasonal	Peak Seasonal	Maximum Population
1980	240	1,850	3,480	3,770
1985	465	3,515	6,612	7,770
1990	700	5,273	9,918	10,335

When compared to the 1976 Land Use Plan's estimates, these figures are somewhat smaller. However, the 1976 figures were based on a central sewage system being installed at West Onslow Beach by this time. At this point there is doubt that a central sewage system will be installed in the next five years due to present plans by the U.S. Environmental Protection Agency to review and possibly cut back on barrier island 201 Wastewater Collection and Treatment projects. Onslow County will continue to support this project and will work toward setting up the Metropolitan Sewer District previously discussed

in conjunction with Surf City, Topsail Beach and a small portion of Pender County.

The Swansboro and Sneads Ferry areas also have a small amount of seasonal population but not enough to justify addressing in great detail.

According to the results of the questionnaire, in the Appendix, 27% of Onslow County's residents would like the county's population to remain the same, while 42% would like it to grow somewhat, or grow a great amount. Onslow's growth rate over the 1970-1980 period was about 8%.

Future Economy

Economic conditions of an area play a major role in the expansion or contraction of employment opportunities. Onslow County's economy is highly dependent on Camp Lejeune Marine Corps Base, whether directly through employment opportunities on the base or indirectly through thr provision of goods and services in the civilian community, such as retail trade, housing, etc.

All present indicators show the military population has stabilized. Therefore, future employment increases must come from the provision of jobs in the civilian sector of the economy. Continued efforts to attract electronic firms, seafood processing and other industries should be successful.

With increased financial pressures facing many families, the number of women seeking jobs should increase. Women presently make up about 46% of the county labor force and that figure is likely to increase. With many "military wives" entering and leaving the local job market, competition for the better paying jobs is very keen.

TABLE 27 CIVILIAN EMPLOYMENT BY INDUSTRIAL BREAKDOWN 1970

	ONSLOW	COUNTY	REGION	P.
TOTAL	18.970	100%	. 134,295	.100%
AGRICULTURE	1,090	5.7	19,210	12.1
NONAGRICULTURE	17,880	94.3	115,085	. 87. 9
MANUFACTURING	1,340	7. 1	24,575	19.4
CONSTRUCTION	6 20	3.3	6, 180	6. 5
TRADES & SERVICES.	5,980	31.5	31,315	23.5
TRANSPORTATION & COMMUNICATION	. 1,090	5.8	4,170	3.0
GOVERNMENT	6,835	36. 0	29,395	20.1
ALL OTHER NON-MANUFACTURING	. 2,015	10.6	19,450	. 15.4

SOURCE: Region P Multi-County Statisfical Data, May 1972 Neuse River Council of Government.

TABLE 28
ESTIMATED EMPLOYMENT BY INDUSTRIAL BREAKDOWN FOR 1975, 1979, 1990, 2000 FOR ONSLOW COUNTY

				
	197 5	1979	1990	200 0
TOTAL	22,710	24,099	28,155	32,450
AGRICULTUR E	99 0	728	400	236
NONAGRICULTURE	21,720	23,371	27,755	32,214
MANUFACTURING	1,830	2,794	3,318	-
CONSTRUCTION	950	1,30 3	1,547	1,796
TRADES & SERVICE	6,340	7,361	8,742	10,146
TRANSPORTATION, COMMUNICATI	ION,		•	
& PUBLIC UTILITIES	920	1,001	1,189	. 1, 38 0
. GOVERNMENT	7,65 0	7,78 8	9,249	10,735
. ALL OTHER NON-MANUFACTURIN	G 2,840	3,124	3,710	4,306

Increased industrial employment will in turn, create a need for additional community facilities, plus additional land for residential, commercial, industrial and recreational purposes.

COMMUNITY FACILITIES

An inventory of existing community facilities and their design capacities will assist in the assessment of future needs.

Solid Waste Disposal

The present approved county landfill for Onslow County is a 75 acre site just north of Jacksonville near SR 1409. The site serves all of Onslow County, including its four municipalities (except Camp Lejeune). The lease for the site expires in the near future, leaving three alternatives: (1) negotiate a new long-term lease, (2) purchase the property, or (3) move to another site.

There is also a former landfill site in the Southwest community that was closed several years ago, plus a landfill at Camp Lejeune operated by the Marine Corps.

Thirteen container sites have been placed strategically around the county to accommodate residents. All sites use forty cubic yard containers. The following table lists all sites and gross cubic yards of dumped waste at each site (non-compacted):

TABLE 29
SOLID WASTE DUMPED PER CONTAINER

(in gross cubic yards)

		· ·		
	Container site	1979	1980	% change
1.	Pumpkin Center	*	4828	*
2.	Swansboro	7388	8098	9.6%
3.	Silverdale	4310	3646	-15.4%
4.	Hubert	8882	8573	-3.5%
5.	Midway Park	14,916	14,112	-3.4%
6.	Georgetown	4,329	3,282	-24.2%
7.	Folkstone	10,575	9,999	-5.8%
8.	Nine Mile	3,741	3,530	-5.6%
9.	Verona	14,981	14,231	-5.0%
10.	Catherine Lake	13,758	11,068	-19.6%
11.	Richlands	7,758	6,760	-12.0%
12.	Onslow Memorial		,	
	Hospital-	*	3,485	*
13.	W. Onslow Beach	*	3,554	*

Source: Onslow Clean County Committee
*Information not available

This solid waste is picked up by the County Solid Waste Department and transported to the landfill for dumping and compaction. Compaction can save up to 60% of the space required for solid waste. The city of Jacksonville is the largest user of landfill space, followed by independent haulers, Onslow County, commercial and construction sites, and private individuals.

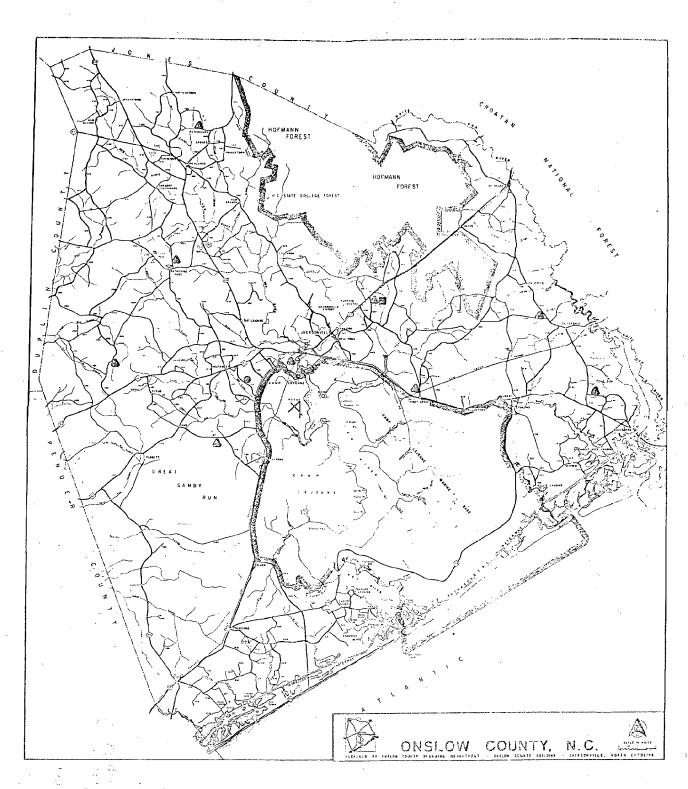
There are no immediate plans for expansion since the existing landfill has an expected life of about ten more years.

Several new container sites are being considered. They include Belgrade, Sneads Ferry, a permanent site at West Onslow Beach, and another site near Richlands (to replace the existing site). County Schools

Efforts have been made to assess the needs of county schools. This inclused an evaluation of existing schools, the need for new schools, and the possibility of combining scholls. A document entitled Onslow County 1979-1980: School Survey Report was prepared by the Division of School Planning, North Carolina Department of Public Instruction. It contains a thorough review of each school and brings to light many needs. The most pressing problems appear to be the age of some buildings, overcrowding at many schools, the lack of a cafeteria at two schools, inadequate size of media centers, and the lack of art centers at most schools. The table on the next page lists each school and its facilities.

Water and Sewer

All four municipalities in Onslow County operate water and sewer systems to various degrees. The City of Jacksonville is presently served by two well fields north of town for its water supply (plus one field in reserve). Total capacity of the system is 6.44 MGD, more than double an average day's useage. Water storage capacity totals 3.3 million gallons. The sewer system has just been updated through the Jacksonville 201 Facilities Plan to meet the city's need through 1995. The sewer plant presently handles an average of 4.46 MGD while having a peak capacity of 12.2 MGD.

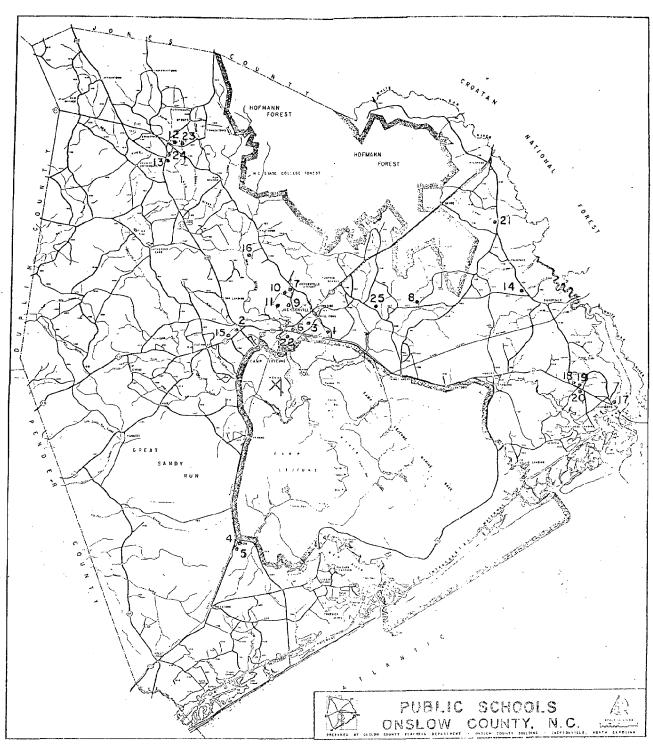


- O COUNTY PARKS
- A GARBAGE CONTAINER SIVES
- 13 LANDFILL LOCATION

MAP 7

16.4---

1960 15 CT 18 CM 18 CM	SCHOOL & GRADES	ACRES	YEAR	ADDITIONS	PROFEASIONAL	CLASSROOMS	DESIGNED		SCHOOLS	ADEGUAC'	OF SPE	CIAI FACII	* * 311	FNRULLIONA
STATE STERN (4-5) 12.70 19.67 19.67 19.6 19.67 19.6			BUILT	-	TEACHERS	OR TEACHING STATIONS *	SCHOOL	PAC	WE DIA LIBRA	ART	AUDITORIUM	GYMTORIUM	CAFETORIUM	1980-81
STATE STAT	7. 1. 2	.27.0	1966	(3)	61	20	4	¥ :	 :				۵	385
FLEK. (K-E) 15.7 1952 19.60 51 19.60 19.	CREEK	26.5	1955/57		32	29	I	_					V	۱,۸
ELEM. (K-E) 23.1 1926 1955/40/44/ 47 41 792 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	EREIN	.15.7	1952	1963	31	28	5	-:		-	A		4	Ji 4
SUPERIOR	23.1	1928	1935/40/43/	47	41	0	_	-				-	1026	
High (19-12) 18-12 19-12/4 19-12 19-				80/51/56/59/							ş		•	2,21
High (3-12)	- 1			61/62/64	,									
High High High High High High High High	DIXGR RIGH (9-12)	.36.	. 1968/69	1975	26	28	616	A :	¥	:		Α		4 53
Hightlorize 42.5 1959 1951/64/64/70 62.5 57 1,034 11 1 1 A	JACKSONVILLE JR. HIGH(7-9)		1940	1951/52/55 59/70		32	099	4	Ą				Ą	9
15.0 1967/68 15.75 26 27 5.06 1 1 1	DACKSONVILLE SR, HIGH(10-12)		1959	19 61/64/68/70	62	57	1,034	_	-		Ψ	٧	-	1 203
15.0 1954 1957/6.7 24 24 52.8 A 1	"CPTON ELEM. (K-5)	20.0	S		26	27	909	_	-					697
37.5 1963 1964/65/ 31 30 660 A A A 19.8 1963 18 17 286 1 A A A 13.6 1926 1935/43/50/ 45 48 1,012 A I A <t< td=""><td></td><td>15.0</td><td>1954</td><td>1957/67</td><td>24</td><td>24</td><td>ĺΝ</td><td>A</td><td>_</td><td></td><td></td><td></td><td>4</td><td>535</td></t<>		15.0	1954	1957/67	24	24	ĺΝ	A	_				4	535
19.6 1926 1935/43/50/ 45 48 1,012 A 1 A A A A A A A A		37.5	1963	1964/65/	12	30	49	∢	A			∢	4	674
13.6 1926 1935/48/50/ 45 48 1,012 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A A	ELEM.		1963		81	17	786	-	4				•	404
42.0 1950 1953/5/779 33 35 770 A A 29.0 1953 1954/5/779 33 35 770 A A A 29.0 1953 1951 1951 1951 11 242 1 1 1 A		13.6	19 26	1935/43/50/	45	48	1,012	A	_		4			0 27
42.0 1950 1950/56/71 33 35 770 A A A A 29.0 1953 1961 13 11 242 1 1 1 20.0 1956 1961 21 20 356 1 1 1 1 20.0 1970 25 20 440 1 A 1 A 1 A	-			52/55/57/	•						:		•	,
29.0 1955 1961 13 11 242 1 1 1 1 20.0 1966 21. 20. 396 1. 1 1 1 20.0 1966 22. 25 20. 440 1 A 1 20.0 1970 18 15 35. A A 1 A 18.0 1975 125/54/57/53 32. 33 726 1 1 A A 28.9 1952 25/66/66/66/66/65 40 29 636 1 A A A 28.1 1962 35/66/66/66/66/66/66 36 27 594 1 A A A 22.6 1964/67 1956/56/66/66/66 26 26 528 1 A A A 8.1 1946 1950/72/74 46 32 704 A 1 A A		42.0	1950	1953/56/71	33	35	770	A	A			A	-	929
20.0 1966 21. 20. 356 1. 1 1 1 1 11.5 1931 1936/31/75 23 20 440 1 A 1 A 1 A 1 A 1 A 1 A 1 A A 1 A A 1 A	ł	29.0	1953	1961	1-1	=	6.3	-	-					Ι,
11.5 1931 1936/31/75 25 20 440 1 A A 1	1	20.0	9961		21.	20	396	-		-			4	767
20.0 1970 16 15 35.2 A A I A A I A A I A A I A <t< td=""><td>1.2</td><td>11.5</td><td>1931</td><td>1936/51/75</td><td>25</td><td>20</td><td>440</td><td>-</td><td>. 4</td><td>-</td><td></td><td></td><td>₹ <</td><td>427</td></t<>	1.2	11.5	1931	1936/51/75	25	20	440	-	. 4	-			₹ <	427
18.0 1975 12 11 242 1 1 i i A A 38.9 1952 \$\frac{55\frac{5}{16}\frac{6}{16}\frac{6}{6}\frac{6}\frac{6}{6}\frac{6}{6}\frac{6}{6}\frac{6}{6}\frac{6}{6}\frac{6}{6}\frac{6}{6}\frac{6}{6}\frac{6}{6}\frac{6}\frac{6}{6}\frac{6}{		20.0	1970		- 18	15	352	A	A	-			c <	2 4
38.9 1952 33.5%/5/5/5/5 33 726 1 1 A A A 64.5 1976 696/162/65 40 29 638 1 A 1 A 22.6 1927 64/56/25/5 30 27 - 594 1 1 A A 18.5 1964/56/7 1950/58 24 16 352 A 1 1 A 48.1 1969 1970/72/74 46 32 704 A 1 1 A	8	18.0	1975		12	=	242	_	_	-				224
64.5 1976 40 29 636 1 A I A 22.6 1927 1947 1950 27 - 594 I I A 18.5 1964/67 1932/53 24 16 352 A I I A 18.1 1948 1950/58 26 26 528 I A I A I 46.7 1969 1970/72/74 46 32 704 A I I A		38.9	1952	053/54/57/	32	33	101	-	-		A	4	4	1 0
DERNACLE SLEM.(4-8) 22.6 1947 1943 7/35/39/22 30 27 594 1 1 A ACALLER JR. HIGH (6-3) 16.5 1964/67 1952/55 24 16 352 A 1 1 A CLPDIN SLEM. (X-6) 8.1 1948 1950/58 26 26 528 1 A 1 A GITE CAN HIGH (9-12) 48.7 1969 1970/72/74 46 32 704 A 1 1 A	CT 1. 1237 (21.28. 11.27. 11.12)	64.5	1976		6.0	62	143	_	A	_		A	4	766
JB. HIGH (6-3) 18.5 1964/67 1952/55 24 16 352 A 1 1 A A. HIGH (9-12) 48.7 1969 1970/72/74 46 32 704 A 1 1 A	CERNACLE	22.6	1927	1943/77/52/	30	2.7	Ç.	_	-			A	A	708
CAK HIGH (9-12) 48.7 1969 1970/72/74 46 32 704 A I I A	1	18.5	19/5361	1952/55	24	16	352	⋖	-	-		4		497
CAN HIGH (9-12) 48.7 1969 1976/72/74 46 32 704 A 1 1 A		60	1348	1950/58	26	92	528	-	Ą	_			A	1 00
	CAK HIGH	48.7	6961	1970/72/74	46	32	704	A	_	-		4	¥	948
(03, 656		627.1			709	656	13,684							14,590
									1					



- I Bell Fork Elem
- 2 Blue Creek Elem
- 3 Clyde Erwin Elem
- 4 Dixon Elem
- 5 Dixon High
- 6 Jacksonville Jr
- 7 Jacksonville Sr
- 8 Morton Elem

- 9 Northwoods Elem
- 10 Northwoods Park Elem
- II Northwoods Pork Jr
- 12 Richlands Elem
- 13 Richlands High
- 14 Officerdale Flom
- 15 South of Cally Jr & Sr
- 16 Sur a ListH Elsin

- 17 Swansbaro Elem
- 13 Secretion Righ
- 18 Swensboro Jr
- 20 Swenshero Middle School
- 21 Tobernacle Elem
- 22 Thompson Elem
- 23 Trealer Jr
- 24 Woodson Elem
- 25 White Oak High

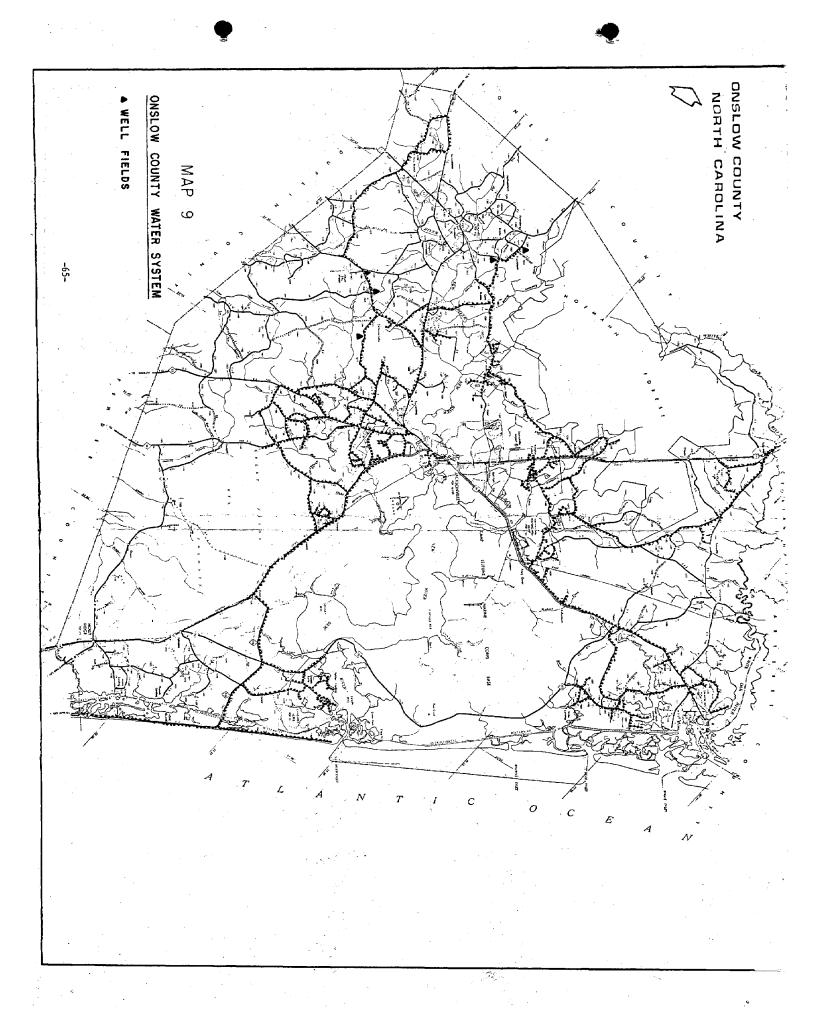
The Town of Richlands is served by three wells providing 400 GPM, more than adequate water for the town's needs. Total water storage capacity is 400,000 gallons. The sewer system has a peak capacity of 300,000 GPD but the average daily use is only about 150,000 GPD.

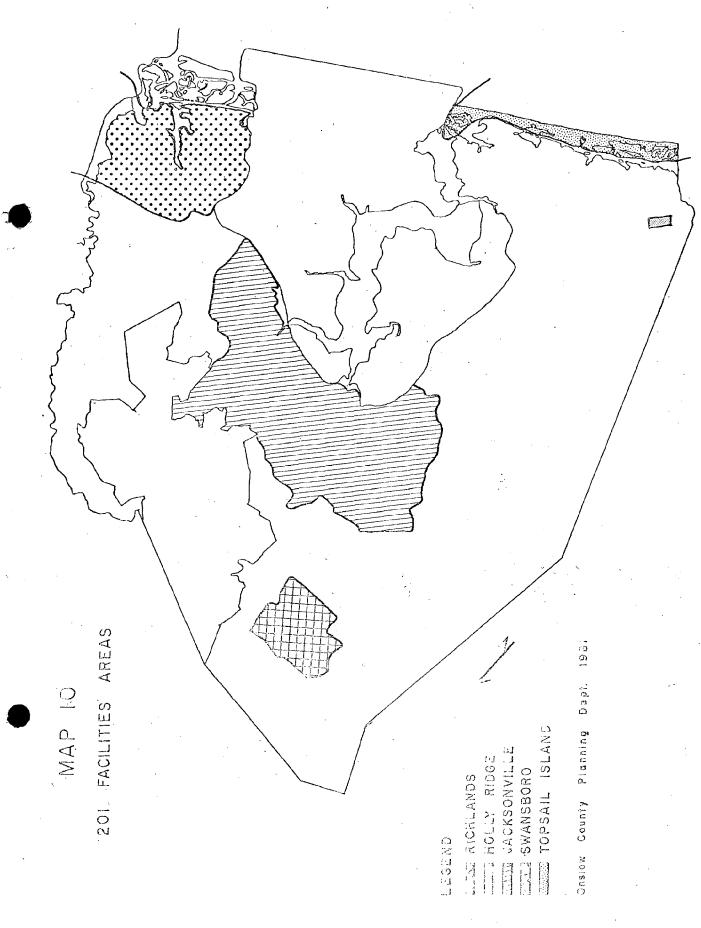
The Town of Holly Ridge is supplied water through only one well at 250 GPD. Should something happen to this well, all town residents would be without water and firefighting capabilities would be severely limited. The answer to this problem is tying onto the county water system which is presently in the planning stage. Holly Ridge's present sewer system is old, inadequate and in need of repair. A rehabilitated system is presently in design phase and construction could start as early as 1982. This would relieve a terrible problem of sewage running into yards and storm sewers and eventually into Kings Creek. Kings Creek is documented as a prime source of high coliform bacteria counts, the criteria used to close shellfish areas.

The Town of Swansboro is served by two wells which supply water at the rate of 300 GPM. Total water storage is 350,000 gallons. Because of recent funds obtained through their 201 Facilities Plan, old sewer lines have been rehabilitated and a new sewer plant has been constructed on the White Oak River. The old plant it replaced was a prime point source of pollution of the White Oak River. The new plant handles about 200,000 GPD on the average with a peak capacity of 500,000 GPD, adequate for the next 20 years.

Onslow County is in the process of constructing a \$15 million county water system. At the present time approximately 300 miles of pipeline, ranging in size from 2 to 14 inches, have been installed. The actual system is shown on the next page. Three wells will serve the system but only two can be pumped at one time, producing 960,000 GPD. This will allow the aquifer to recharge itself properly. Approximately 25,000 residents will be served initially, plus a number of businesses, industries and schools. Water storage at this time is 2.9 million gallons.

Onslow County is also the lead agency in the Topsail - Surf City 201 Facilities Plan. The plan excompasses several items; the construction of collector lines for Surf City, Topsail Beach, West Onslow Beach and





5-

a small portion of Pender County; transmition lines; and a 1.15 MGD sewage treatment plant using lagoons and a land application system. Total cost of the project in 1979 dollars was \$15 million, all but about \$2 million to be derived from state and federal grants. This project has been delayed, along with other barrier island 201 projects, while the U.S. Environmental Protection Agency prepares an Environmental Impact Statement for all these projects. The EIS will determine if these 201 facilities are actually needed, if they are needed only in certain portions of the 201 planning areas, or if they are not needed. Several other issues will also be discussed; water quality, wetlands protection, natural disaster risks, federal subsidy of recreational homes, public access, erosion control and reduction of federal expenditures.

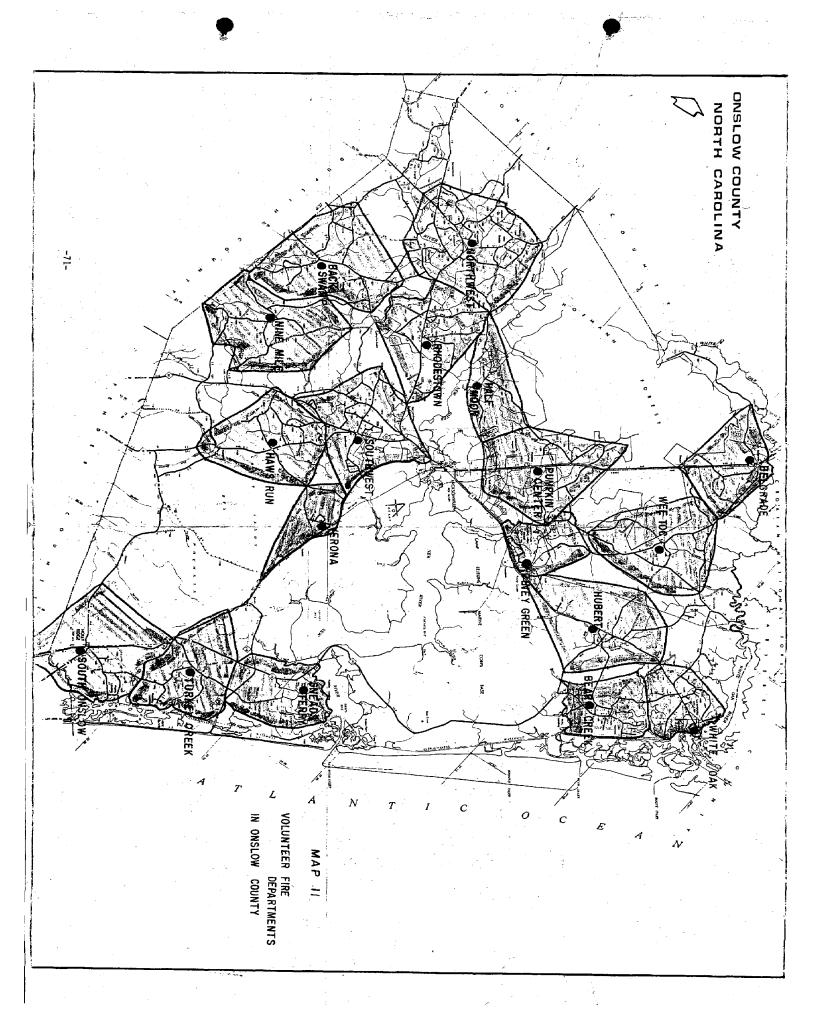
Should the sewer system become a reality, an organization called a Metropolitan Sewer District will be organized to administer the system. Each unit of government has agreed that this district would be the best way to handle a 201 planning area covering two towns and portions of two counties. The Environmental Management Commission will hold a public hearing at the request of the boards of county commissioners. If proper petitions are signed and if creation of the MSD is desirable for the public health and welfare, the Environmental Management Commission can adopt a resolution creating the MSD. Court action creating the MSD or contesting its validity must be taken within 30 days after first publication of the resolution. If created, the MSD will be operated by a board appointed by the governments in which it is located. All units of government have agreed to organizing the MSD. Fire Departments

In addition to the City of Jacksonville's full-time fire department, Onslow County is also served by 18 volunteer departments. The fire-fighting capacity of many departments not only depends on the men involved but in there equipment too. Below is a listing of each department and its fire-fighting vehicles, some of which we beginning to show some age and should be replaced.

PUMP/G.P.M.	500 150 750 300	750 750 90	750 60 350	350 750 350 350 350	750 750	750 500 750 500 0 65 250	750 750 750 750
CAPACITY IN GALLONS	550 250 750 1200	750 500 200	750 , 1500 350	825 750 1500 1200 250	750 750	750 500 250 600 1800 280 300	750 750 750 500
TYPES OF EQUIPMENT	1952 International Pumper 1962 Dodge 3/4 ton Light Brush Truck 1977 Ford Darley Pumper 1980 Ford Pumper Tanker	1974 Ford Darley Pumper 1946 Mack Hale Pumper 1973 Ford Darley Pickup	1974 Ford Darley Pumper 1966 International Tanker 1942 Chevy Pumper	1973 Chevy Darley Pumper 1974 Ford Darley Pumper 1977 International Hale Tanker 1979 Chevy Jet Dump Tanker 1981 Ford Pickup	1975 Ford Darley Pumper 1969 Ford Darley	1975 Ford Darley Pumper 1952 Chevy Darley Pumper 1953 Ward Lafrance Pumper 1955 Rio 1953 Rio 1967 Kaiser Jeep 1953 3/4 ton Dodge (from Forestry)	1975 Ford Darley Pumper 1972 Ford Darley Pumper 1969 Ford Darley Pumper 1966 Ford Pirsch Pumper
NAME/LOCATION	Back Swamp VFD	Bear Creek VFD	Belgrade VFD	Half Moon VFD	Haws Run VFD	Holly Ridge VFD	Hubert VFD

750 650 60 0	750 500 350 90	750 350 350 350 350 750	750 750 60 0	750 500 0 1000	750 750 60 0	350 750 350 80
750 750 750 250 2000	750 800 750 300	750 1700 850 225 750 0	750 550 300 1000	750 500 1200 500	750 750 100 2000	1000 750 .1000 2000
100n)	ınker	Pumper er Unit		S. J.		
Ford Darley Pumper Ford Hale Pumper Kaiser Jeep (from Half Moon) Ford F-700	Darkey Pumper Rio Pumper (Barton American) Tanker er Jeep Mini Pumper	Ford Pumper Ford Darley Tanker Ford Darley Pumper Kaiser Jeep Darley Mini Pu Ward Lafrance Pumper Studebaker Light & ladder	Pumper umper	1 Pumper rance		Pumper Pumper Pumper anker
Ford Darley Pumper Ford Hale Pumper Kaiser Jeep (from Ford F-700	Ford Darley Pumper GMC Rio Pumper Rio (Barton Americ Kaiser Jeep Mini P	Ford Dumper Ford Darley Tanker Ford Darley Pumper Kaiser Jeep Darley M Ward Lafrance Pumper Studebaker Light & 1	Ford Darley Pumper Chevy Pumper Dodge Mini Pumper Chevy Tanker	Ford Pumper International Pum Dodge Tanker Ford Am. Lafrance	Ford Pumper Ford Pumper Kaiser Jeep Chevy Tanker	Ford Darley Pumper Ford Darley Pumper Ford Berkley Pumper GMC 2½ ton Tanker
1976 F 1948 F 1967 F 1968 F	1975 H 1951 G 1952 H 1967 R	1975 1968 1970 1967 1953 1953	1974 I 1967 C 1954 I 1959 C	1975 F 1956 1 1958 I 1971 F	1972 1975 1967 1962	1971 H 1977 H 1975 H 1953 G
Nine Mile VFD	Piney Green VFD	Pumpkin Center VFD	Rhodestown VFD	Richlands	Sneads Ferry VFD	Southwest VFD
Nine	Pine	Pump	Rhod	Rich	Snea	Sout

Swansboro VFD	1972 Ford Pumper 1974 Ford Pumper 1966 Chevy Pumper 1966 GMC Truck	750 750 750	750 750 750
Turkey Creek VFD	1977 Ford Pumper 1940 Chevy Pumper 1951 Chevy Tanker	750 500 1000	750 500 0
Verona VFD	1970 Dodge Pumper 1974 Ford Pumper 1950 Chevy Pumper	750 750 1000	750 750 500
White Oak VFD	1977 Ford Pumper 1952 Ford Pumper	750 1000 1000	75(



Parks

In addition to parks and recreation facilities provided by schools and municipalities, Onslow County provides two parks for the enjoyment of its citizens. The first park is a 42 acre tract on Onslow County Pines Road about four miles southwest of Jacksonville and contains the following facilities:

- Covered picnic pavilion (60 seat capacity).
- Tot-lot area.
- 3. Bicentennial Nature Trail (mile long with rest shelters and 21 interpretive stations).
- 4. Multi-purpose outdoor arena.
- 5. Physical fitness trail (9/10 mile long with 13 exercize stations).
- 6. Senior citizens area.
- 7. Four lighted tennis courts.
- 8. Two full basketball courts.
- 9. One little league field.
- 10. One combination baseball/softball/football/soccer field.

The second-park is a 37.5 acre tract on old N. C. 24 near Hubert. Presently under construction, the park will eventually contain the following facilities:

- 1. One combination soccer/football field.
- 2. Two full length basketball courts.
- 3. Park concession/pavilion/restroom complex.
- 4. 8/10 mile jogging trail.
- Senior citizens area.
- 6. 6/10 mile nature trail.
- 7. 16 primitive camp sites.
- Parking to accomodate campers and buses.

The unincorporated community of Sneads Ferry has a 10 acre community park that presently contains a softball field.

Coastal Carolina Community College

Coastal Carolina Community College is located on Western Boulevard in the City of Jacksonville. The 75 acre campus serves approximately 2,500 full and part-time students with a number of programs such as Pre-Engineering, Pre-Agriculture, Pre-Business Administration, Electronic Data Processing and Secretarial Science. Degrees include Associate in Arts, Associate in Science, Associate in Fine Arts and Associate in Applied Sciences. Diploma and Certificate programs are also available.

Future construction includes a Fine Arts Building and a Skills Center in the immediate future plus long range plans for a Physical Education building, a Lecture Hall, another classroom building and a greenhouse. A primary use of the Skills Center will be to train residents so their skills will match the needs of industries locating

in Onslow County.
Transportation

Albert J. Ellis Airport is located approximately 14 miles north of Jacksonville. Facilities at the airport include a 7,100 foot runway, a 7,100 foot taxiway, a 13,100 square foot terminal building, one small hangar and a crash-fire-rescue building and its related equipment. There are 17 aircraft based at Ellis Airport. In addition, Piedmont Airlines has a number of flights coming and going daily. This number may vary according to need. In the past two years Piedmont passengers and flights have begun to drop as the following table shows:

TABLE 32
PIEDMONT AIRLINES TRAFFIC, 1975-1980

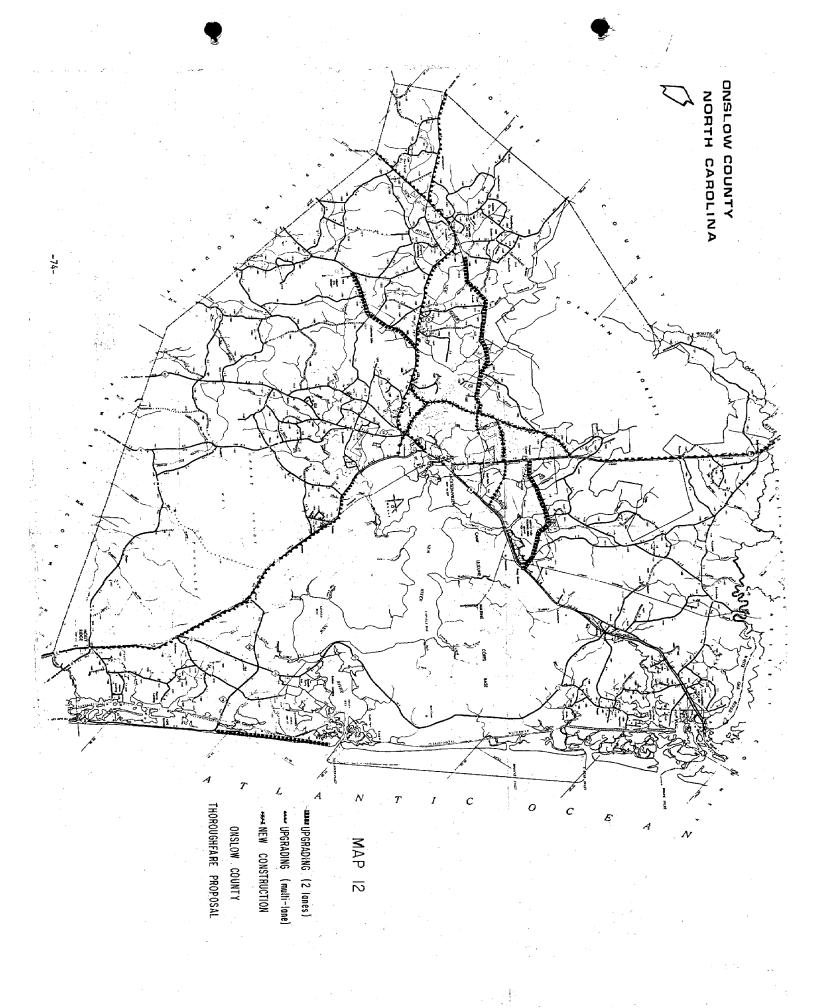
•	ALBER	RT J. ELLIS AIRPORT	A	ctual `
Year	Enplanements	<u>Deplanements</u>		epartures
1975	42,853	56,595	٠	2,484
1976	45,444	57,196		2,197
1977	47,246	62,325		2,175
1978	48,380	64,050		2,611
1979 .	47,480	61,597		2,317
1980	39,894	49,315		1,899

Source: Piedmont Airlines

According to Piedmont authorities, the reason for the drop appears to be the sagging economy and a drop in military travel.

The North Carolina Department of Transportation has not prepared a thoroughfare plan for Onslow County. They have scheduled improvements through their Seven Year Plan, however, which include: upgrading Western Boulevard from two lanes to a multi-lane facility; upgrading U. S. 258 (from U. S. 17 to SR 1001) from two lanes to a multi-lane facility; and extending Western Boulevard (two lanes) from U. S. 17 to Gum Branch Road.

A number of additional projects need to be completed to satisfy Onslow County's transportation needs. They are shown on the map on the following page.



Traffic volumes have decreased slightly on some highways while increasing slightly on others. The Onslow County Energy Commission suggests that the decreased are related to fewer trips and carpooling due to the price of gasoline. (see Map 1).

FUTURE LAND NEEDS

Onslow County will continue to grow, although not at the rates experienced in the 1940's and 1950's. To accommodate this growth, land must be provided to locate various types of land uses around the county.

More recreation areas are needed to serve the more rural townships of Stump Sound, Richlands, White Oak and Swansboro. Jacksonville Township is adequately served by the City of Jacksonville and Onslow County.

In estimating the recreation land needed in Onslow County, two totals were formulated: the total acreage of recreation land and the total number of people in the county proper. Approximately 1,050 acres are presently used for recreation in the county. This total is a combination of school acreage, parks and state parks.

Approximately 52,000 people live in unincorporated Onslow County, or 46% of the entire population. Thus, there are twenty acres of recreational land for every 1,000 people.

The North Carolina Department of Natural Resources and Community

Development recommends eight acres of recreational land per 1,000

population. Beach areas provide some recreation land but access could

be a big problem in the future. However, there are needs for specialized

recreation areas in different locations. Pure acreage figures do not

represent a clear picture of recreation needs, and it is recommended

that a detailed recreation study be prepared.

The estimates for residential land are based on the same population figures as the recreation figures. The total number of acres is calculated by multiplying the total number of residential units by .356 acres of land. The latter figure is an estimate of an average residential lot in unincorporated Onslow County. The small acreage assigned per unit

reflects the large number of mobile housing units in mobile home parks, condominiums and multi-family dwellings. The total residential acreage estimated to be needed over the next ten years can now be estimated by multiplying the projected total increase in families (1,617) by the average lot size. The total acreage needed is 576.

%! .

The estimated industrial land demand will increase as the economy of the state and nation improves. There is no sure means of determining how many industries will locate in Onslow County. The closest approximation is an attempt to show the relationship of industry to population.

Industry occupies approximately 600 acres of land in Onslow County. Using the 52,000 estimated population figure, there are .015 acres of industrial land per person. By 1990, assuming an increase of 7,852 persons, an additional 90 acres will be needed.

Commercial growth is determined in the same manner as residential growth. Approximately 561 acres are being used for commercial land use. This figure is the product of 740 identified commercial sites in the county and an estimated .76 acres per average commercial lot in the county. With our 52,000 person population figure, we arrive at .0108 acres per person, by 1990 we will need 85 additional acres for commercial use.

TABLE 33
ONSLOW COUNTY LAND USE NEEDS

		Acreage	
	1980	Needed	<u>1990</u>
Recreation	1.050		
Residential	6,170	576	6,746
Industrial	600	·90	690
Commercial	561	85	646

Note: Excludes municipalities and Camp Lejeune

Some of the land needed for this development will be converted from agricultural usage to homes and businesses, especially in the vicinity of the City of Jacksonville. This will create a need to use marginal land for crops. Timber land near Jacksonville will also be converted.

It insure for desirable layouts of lots, proper drainage, street construction and utility access, the Onslow County Subdivision Regulations

are being enforced countywide. Zoning designates areas for specific uses and provides for orderly and compatible development. At the present time only West Onslow Beach is zoned. However, land around Albert J. Ellis Airport is under study at this time to be zoned as should other areas that are or could be subject to development.

West Onslow Beach

At this time there is uncertainty over the future of providing central sewage facilities at the beach. An environmental impact statement is being prepared for the U. S. Environmental Protection Agency to review all barrier islands 201 Plans. All of Topsail Island falls under this review which will decide the fate of many barrier island sewage proposals.

Even if the beach 201 plan is not funded, growth will continue to occur. On-site sewage disposal similar to the North Topsail Shores plant will be used for large projects in the future, thereby limiting density only marginally. West Onslow Beach is now served by the county water system for the first time, providing the entire county with an ample amount of potable drinking water. This will encourage more beach development, especially on several large tracts that have remained undeveloped because of the lack of community facilities provided by the county.

West Onslow Beach is a unique and irreplaceable resource that is enjoyed by thousands of citizens of Onslow County, North Carolina and many states along the east coast. With development pressures increasing, it will be up to Onslow County through its ordinances (Zoning, Subdivision Regulations, CAMA, septic tank regulations, beach vehicle regulations) and the State of North Carolina (CAMA, water quality, septic tank regulations, etc.) to insure that proper development occurs and that public access is required. Proper development includes setbacks from the ocean and buildings constructed at elevations to limit the possibility of their destruction by the ocean. It also includes preserving our estuaries and marshlands in their natural condition.

The impact of potable water available in large quantities at
West Onslow Beach will result in increased development and a drop in
the amount of land presently used by the public for access to the ocean.

The loss of this access must be offset in the future by the county, state, or federal government providing permanent public access.

COMMUNITY FACILITIES DEMANDS

Most existing community facilities provided by the county for public uses will be sufficient for the next ten years. Those facilities that will need additions or modifications are listed below.

Solid Waste

The county is presently served by a landfill on a rented 75 acre tract just north of Jacksonville. Another landfill in the Southwest community was closed several years ago due to a number of problems, including high water table and the expense of operating two landfills. The present landfill should last at least ten more years, according to projections of the landfill supervisor. However, the lease on the property runs out in six years. Therefore, the county should make a decision as to whether the existing landfill property should be purchased, the lease should be extended, or another site should be under consideration.

In an effort to extend the life of the landfill, the feasibility of resource recovery should be considered. The Onslow Clean County Committee estimates that 80% of the material dumped in the landfill is recoverable (paper, glass, tires, metals, etc.). They also estimate that 80% of the material is combustible and can be used as an energy source. A feasibility study could determine if the volumes of dumping are large enough to justify a resource recovery operation or using the waste as an alternative fuel. A feasibility study could also determine the potential for a combined civilian-military solid waste disposal system.

Onslow County should also guard against the encroachment of residential subdivisions near the landfill. The smell of garbage before it is covered and blowing sand prior to revegetation can create problems for nearby residents. Zoning around the landfill is one alternative that can be considered. If subdivisions continue to develop in the landfill vicinity, the possibility of well contamination

increases. This could force the county into lining the landfill, which is expensive, or moving to another site, which is even more expensive. Schools

Many of Onslow County's schools have needs. However, most of these needs are for existing schools, such as the lack of adequate classrooms, renovations, the need for several cafeterias, the need for a gym, and other additions. With school attendance leveling off, the county should catch up with these needs. One exception to this trend is White Oak Township which is served by White Oak High School, Tabernacle School, Morton Elementary and Silverdale Elementary. With the exception of Silverdale, the remainder are overcrowded. This area is projected to receive a large population increase in the next ten years. Existing schools must be prepared to handle this increase. Another problem arises in that Tabernacle School is not located in the immediate area which will increase in population. A decision must be made as to:

(1) whether additions will be built to the old school; or, (2) whether the old school will be abandoned in favor of a new school closer to the population it serves (see Onslow County School Survey Report, 1979 -80.)

White Oak High School is presently undersized by 35%, Morton Elementary by 38%. With attendance levels to increase at these schools, provisions should be made to handle that increase.

Parks and Recreation

At this time there are no public parks at West Onslow Beach. With that area beginning to develop rapidly and the price of beach real estate escalating, the chances of providing a public park are becoming slimmer. While property is available and the price reasonable, oceanfront property should be purchased in a sufficient amount to serve Onslow County's needs in the future. The funds for this purpose could be from county, state and/or federal sources, in addition to private donations. Plans should also continue in developing existing county property at the beach.

COMMUNITY ISSUES

I. ISSUE - Growth of Onslow County

Onslow County's growth has caused some problems but has also created many benefits. The booming economy of the 1940's, 1950's and 1960's slowed somewhat in the 1970's. This trend will probably continue throughout the next decade. Much of the county's growth will continue to be in the vicinity of the City of Jacksonville while some scattered rural and community development will be evident. The new County Water System may encourage development in some portions of the county outside Jacksonville's "sphere of influence". West Onslow Beach will grow by leaps and bounds barring problems associated with hurricanes. Beach erosion at this point in time is minimal.

According to the Land Use Plan questionnaire, residents desire a moderate amount of growth that can be handled properly while preserving the existing character of rural areas. Successful promotion of industry in the vicinity of our communities and the airport should generate some growth.

Policies include:

- 1. Allowing development to occur in an orderly manner.
- Permit intense development in those areas which are served or will be served with urban services.

Means for implementing policies include:

- 1. Establish a Land Use Plan by which development proposals may be reviewed for consistency.
- 2. Conform to the State's Balanced Growth Policy.
- Conform to all land use ordinances enforced by Onslow County.

Primary responsibility will lie with the Board of County Commissioners, the Planning Board, the Water and Sewer Advisory Commission, the County Manager and the County Planning Director.

- II. ISSUE Resource Protection
- A. Ocean dunes and beaches
- B. Coastal wetlands
- C. Estuarine waters
- D. Public trust waters
- E. Estuarine shoreline
- F. Other hazardous, fragile or historic areas.
- G. Off-road vehicles.

Suitable Uses

- A. Ocean dunes and beaches Uses shall be compatible with CAMA regulations and policies. Highest priority given to preserving the dune system and preserving access to the beach strand. Second priority is given to uses which comply with all local, state and federal laws. Depending on the site and surrounding land uses, possible uses could include residential, commercial, public, semi-public or recreational uses.
- B. <u>Coastal wetlands</u> Uses shall be compatible with CAMA regulations and policies. Highest priority shall be given to preserving coastal wetlands. Second priority shall be given to those activities which require water access and cannot function elsewhere, or agricultural areas.
- C. <u>Estuarine Waters</u> Uses shall be compatible with CAMA regulations and policies. Conservation of these waters and its components is very important. Uses shall be allowed which require water access or which cannot function elsewhere such as access channels, erosion control structures, navigational channels, docks, marinas, piers, wharfs, pilings or bridges.
- D. Public trust waters Uses shall be compatible with CAMA regulations and policies. Permitted uses shall not hinder access or cause biological or physical damage to the estuary. These uses include navigational channels, drainage ditches, erosion control structures, piers, wharfs, marinas, and bridges. Uses should be monitored to insure that navigation will not be hindered, erosion will not be perpetuated, and water quality will not be damaged.
- Estuarine shoreline A strip of land 75 feet wide from mean high water inland. Uses shall be compatible with CAMA regulations and policies. Future development should be compatible with the nature and the values of the estuarine system. Permitted uses should consist of recreational uses and low density residential and commercial uses which will not

greatly increase runoff into an estuary.

F. Other hazardous, fragile or historic areas - Builders and home-buyers should be aware that the New River Inlet has historically moved north and south for several thousand feet from its present location. The inlet is presently moving southerly and could endanger structures adjacent to it in the future. All uses in the inlet hazard area, as defined by the Coastal Resources Commission, shall comply with all CAMA regulations and policies.

A great deal of land in Onslow County, especially along bodies of water, may have archeological or historical significance. Lands known to have archeological or historical significance shall be reviewed through local ordinances before development takes place.

Portions of Onslow County around Albert J. Ellis Airport are subject to high noise levels and potential airplane accidents. A Land Use and Noise Analysis is presently being conducted to determine where problem areas are and what can be done to either alleviate them or to keep them from multiplying. Recommendations made in this study should be considered to preserve the safety and property of nearby residents.

G. Off-road vehicles - Off-road vehicles are presently regulated by the county at West Onslow Beach. From May 15 to September 10 of each year no vehicles are allowed on the beach strand or dunes. Only four-wheel drive vehicles (with 2 minor exceptions) are allowed on the beach strand during other periods. Strict regulations are enforced as to crossovers and legal driving areas. Lack of manpower hampers good enforcement of the ordinance.

Means for protecting AEC's and other sensitive areas while insuring public access:

Implementation methods for protecting AEC's and other sensitive areas while insuring public access:

- 1. Support the work of the North Carolina Office of Coastal Management and the local CAMA Permit Officer.
- 2. Support the evaluation and permitting of activities in environmentally sensitive areas by the U. S. Army Corps of Engineers and Marine Fisheries.

- Continue to enforce health regulations relevant to septic tank placement.
- 4. Protect environmentally sensitive areas by locating new development in accordance with the CAMA Land Use Plan.
- 5. Seek grants to study and evaluate our natural recources.
- 6. Seek the purchase or donation of oceanfront and other beach property to provide public access to the Atlantic Ocean and sufficient parking areas. Fencing and crosswalks should be installed to protect the dune system.
- 7. Adopt a Flood Hazard Ordinance after the county has been officially mapped for flood prone areas.
- 8. Support the construction of central facilities where septic tank effluent is a contributor to water pollution and shellfish closings.
- 9. Build permanent vehicle crossovers from the highway to the beach strand.
- 10. Continue to enforce the ordinance regulation vehicular traffic on the beach strand.

III. ISSUE - Resource Production and Management

Onslow County has a number of resources which are very productive and should be protected. They include:

- A. Productive agricultural lands.
- B. Commercial forest lands.
- C. Mineral production areas.
- D. Commercial and recreational fishing.
- A. Productive agricultural lands If growth continues to occur under present laws and policies, there is a greater possibility of converting productive agricultural land to non-agricultural uses. Three options exist: (1) try to stop growth, which is totally undesirable; (2) promote growth anywhere, which is equally undesirable; or (3) develop Onslow County with sensitivity to what is already here and at a rate our resources can handle while preserving our agricultural land.

Policies include:

- 1. Encouraging the use of productive agricultural lands for agriculture.
- 2. Assessing land constraints prior to changing land from agricultural uses.
- 3. Encouraging the passage of bills in the General Assembly which would preserve productive agricultural land.
- 4. Encouraging farm programs which will keep good land in cultivation. Means of implementation:
- Use the Soil Conservation Service soil survey in evaluation proposed developments.
- 2. Have farmers sign tax agreements for keeping property valuations lower in exchange for keeping their land in agriculture.
- 3. Work with the Agricultural Extension Service and other agricultural related organizations to improve awareness of the necessity of preserving productive land.
- B. Commercial forest lands Commercial forest lands comprise over threefourths of the land area in Onslow County. Much of this land is owned
 by timber companies while private individuals, the U. S. government and
 the State own the rest. This resource is not only important to Onslow
 County but to the entire southeastern portion of the State. Many incomes
 are derived through forestry products. However, due to nature's delicate

balance, our forest resources should not be abused.

Policies include:

- 1. Encourage reforestation of harvested timber land.
- Encourage land-owners to work with agencies (N. C. Forest Service, etc.) that will help them protect and market their timber.
- 3. Encourage landowners to protect fragile areas adjacent to their timber land (marsh, estuaries, etc.).

Means of implementation:

- Landowners are eligible for free seedlings through the local ASCS office.
- 2. Ask landowners to contact the N. C. Forest Service before burning of any type.
- Ask landowners to check into proper harvesting techniques and reforestation methods before cutting timber.
- 4. Ask landowners to leave a natural barrier around streams when cutting timber in an effort to cut down on pollution and siltation.
- Mineral Production Areas Mineral resources in Onslow County are minimal. Only stone is being mined in the Belgrade community adjacent to the White Oak River. However, large peat logs are located in several portions of the county and may be a source for future energy demands.

Policies include:

- 1. Support the development of mineral deposits found in the future.
- Insure that developing mineral resources does not harm our economy or our water and air quality.

- 1. Seek grants to fund the evaluation of developing our mineral resources such as peat.
- 2. Support the preparation of environmental impact statements for projects like peat mining.

D. Commercial and Recreational Fishing - The fishing industry has always been important to Onslow County and is continuing to grow. However, siltation, fresh water intrusion and shallow channels are causing problems which must be alleviated.

Policies include:

- 1. Support the expansion of commercial and recreational fishing and shellfish.
- 2. Improve access to ports through widening and deepening channels.
- 3. Support efforts to limit fresh water intrusion into salt waters.
- 4. Support efforts to cut down on the siltation and pollution of our salt water estuaries.
- 5. Support efforts to expand markets for local seafood.
- 6. Support efforts to determine the problems of the White Oak River and resolve them.

- 1. Have the Economic Development Commission seek to have seafood processing industries locate in Onslow County or to find seafood processing industries that will handle more of the local catch.
- Seek funding from state and federal agencies that can provide funds for dredging channels into the New River and White Oak River for better boat access.
- 3. Evaluate all channelization projects that can cause water quality problems in our estuaries.
- 4. Seek funds to build an artificial fishing reef off the coast. Funding may be received from the U. S. Dept. of Energy.
- 5. Seek funding to evaluate the effects of the N. C. 24 bridge-causeway and the Atlantic Intracoastal Waterway on the White Oak River.
- 6. Seek funding to implement the recommendations of the White Oak River Study.

IV. ISSUE - Economic and Community Development

A. Residential

D. Public facilities

B. Commercial

E. Energy Resources

C. Industrial

F. Commitments to state and federal programs.

A. Residential - Presently only 11% of Onslow County's housing stock is substandard, a very low figure compared to other counties in eastern North Carolina. Occupancy rates of available housing are very high. If present rates continue, more than 2,600 new housing units must be built by 1990 to keep up with growth. Look for mobile homes to increase in popularity as conventional single-family homes increase in price.

Policies include:

- 1. Encourage the development of various housing types (such as mobile home parks, planned unit developments, apartments, conventional single-family homes, etc.) in the proper location.
- 2. Support efforts to improve the quality of living in Onslow County.
- 3. Support local communities in their efforts to be served by water and sewer facilities.
- 4. Encourage residential development to occur near municipalities or communities.
- 5. Help communities with their water and sewer problems.

- 1. Continue to enforce county-wide Subdivision Regulations.
- 2. Continue to enforce the State Building Code and CAMA Regulations.
- 3. Enforce the County Zoning Ordinance in areas that are subject to development pressures.
- 4. Educate county residents about the benefits of zoning.
- 5. Continue to seek funds such as Community Development Block Grants to improve housing and public services.
- 6. Continue to support the County Water System.
- 7. Continue to support health and sanitation regulations.
- 8. Continue to support the housing rehabilitation efforts of the Dept. of Social Services, Region P and other qualified agencies.

- 9. Seek funding for community facilities through EPA, Farmers Home Administration, HUD, etc.
- B. Commercial development in Onslow County is increasing as shown by the construction of a new mall this year on Western Boulevard. This new development is needed to serve existing and future residents.

Policies include:

- 1. Commercial development should be clustered around intersections and not stripped along major highways.
- 2. Commercial development should be compatible with its surroundings and not encroach on residential areas.
- 3. Onslow County should work to recruit new businesses.
- 4. Regulate the location and density of adult businesses.
- 5. Promote tourism throughout the county.

Implementation methods:

- Enforce the Onslow County Zoning Ordinance in areas subject to strip commercial development or subject to the location of adult businesses.
- 2. Encourage businesses to locate at intersections.
- C. Industrial The need to diversify our economy is paramount. Not only would new industry provide more, better paying jobs, but it would add to the county's tax base, spur home building, generate more retail sales and many other benefits. When seeking industry, however, we should seek quality and not quantity. We should also seek industry that will not waste or pollute our natural resources.

Policies include:

- 1. Encouraging industries that will be compatible with the surrounding communities, and will comply with state and federal standards.
- Supporting public facilities extentions as inducement for locating industry in Onslow County.
- 3. Evaluating the impact of new industry on the county's resources.
- 4. Seeking military discharges with proper training to work for local industries.

5. Working with local industries in the training of workers at the the new Skills Center at Coastal Carolina Community College.

Means of implementation:

- Develop an evaluation criteria in cooperation with the Economic

 Development Commission for new industry (See Environmental Effects

 of Potential Development Activities in Coastal Onslow County.)
- 2. Continue supporting the Economic Development Commission.
- 3. Help local communities with their planning and financing of community facilities.
- 4. Coordinate the efforts of the Onslow County Planning Department,
 Y.O.U. and the Economic Development Commission in locating industrial
 sites.
- D. Public facilities The questionnaire which is a part of this land use plan gives some indication as to the types of services and facilities requested by the citizens of Onslow County.

Policies include:

- 1. Developing services and facilities in coordination with expected growth.
- Locating services and facilities where they may best serve the county's population.
- 3. Seeking funds from various sources to provide public facilities for county residents.

- 1. Prepare and distribute a citizen survey periodically to determine levels of need.
- 2. Address the following needs as recorded through the Citizens Land Plan Questionnaire.
 - a. Improve mosquito control and drainage by spraying more and ditching in many areas where stagant water stands. Funds: County taxes
 - Continue to improve county recreation facilities and beach access for the public by developing a Master Park Plan for

the county and by purchasing or receiving donations of land at West Onslow Beach. Continue to require pedestrian easements as required by the County Subdivision Regulations. Funding: County taxes and the National Park Service.

- c. Promote the improvement of our transportation systems in order to foster economic development. Promote the widening of U. S. 17, N. C. 24, and U. S. 258, paving secondary and primary roads, bridge improvements, improved channelization of the New River and White Oak River, and continued operation of all railroad lines in the county. Funds: Dept. of Transportation, U. S. Army Corps of Engineers, Sea Grant program.
- d. Schools Improve the quality of schools by updating classrooms facilities, cutting teacher/student ratios and building other facilities deemed necessary by the Board of Education when funds permit. Funding: State of North Carolina, U. S. Government (Federal Impact Aid), county taxes, county bond referendum.
- e. Public transit Public transit is being offered to a number of needy residents by OUTS (Onslow United Transit System), a combined effort of the Dept. of Social Services and several other human service agencies. Additional public transit is provided by Camp Lejeune for its personnel. The opportunity for a county public transit system is remote due to the lack of dense population.

A study should be done to determine the feasibility of public transit in the Jacksonville - Camp Lejeune area.

Funding: U. S. Dept. of Transportation.

- f. Land use planning An effort should be made to implement a comprehensive land use planning program in portions of Onslow County subject to future development demands. This includes continued use of the County Subdivision Regulations, implementation of zoning where the need arises, solid waste planning, implementing CAMA regulations, etc. Funding: County taxes, CAMA grants.
- g. Undertake measures to reduce crime in the county. Evaluate and study existing policies and methods and determine a course of action by 1985. Funding: County taxes, State of North Carolina.
- h. Review the Land Use Plan annually to insure compatibility with the plans and programs of other counties, our municipalities, and Camp Lejeune.

F. Energy Resources - A local as well as a national issue is the need to conserve our existing resources in addition to identifying and developing new resources. Easily identifiable energy resources throughout the county include the wind, peat, wood, corn, chicken and swine manure, and garbage. However, the feasibility of using these resources cannot be determined without further study.

Policies include:

- 1. Evaluating our energy resources so that we may plan for effective utilization.
- 2. Evaluating the impact of developing our energy resources on the surrounding environment.
- 3. Promoting the development of locally produced alternative fuels.
- 4. Promote the Onslow County Energy Commission and its public education programs.

Means of implementation:

- 1. Seeking grants to fund the evaluation of our energy resources.
- 2. Preparing Environmental Impact statements for energy development projects.
- Seeking grants to determine the impact of energy projects on the county's economy.

(Funds may be available through the U. S. Dept. of Energy).

G. Commitments to State and Federal Programs - Onslow County is committed to those programs that will help the economy, preserve our natural resources and make Onslow County a nice, safe place to live.

Policies include:

- 1. Continue to work with Camp Lejuene in making Onslow County a good place to live.
- Continue to support CAMA regulations and to limit development in highly erodible areas.
- 3. Work with appropriate state and federal agencies to locate and use spoil areas (with property owner consent) for dredging projects in the New River and White Oak River.

- 4. Assist in developing and implementing plans for dredging New River and rehabilitating the White Oak River.
- 5. Help the state and federal governments to enforce their laws and licensing requirements contained herein by working with them.

- 1. Developing a task force made up of representatives from Camp Lejeune,
 New River Air Station, Onslow County and it's municipalities to meet
 periodically to discuss mutual problems as related to land use,
 solid waste, sewage, transportation, etc.
- 2. Seeking funds to rehabilitate the White Oak River and dredge deeper channels for the New River.

LAND CLASSIFICATION

In discussing land classification, we must use population projections, development constraints, community policies and other statistical data to make the proper decisions. A land classification system has been developed to guide future activities and construction. It provides a framework for Onslow County to use in illustrating policy statements as to where we want growth, at what density that growth should be, and what areas we want conserved. There are five basic classifications of land: developed, transition, community, rural and conservation. The developed areas will be broken down into developed and developed without central sewer for better identification.

The Onslow County Land Classification Map is in accord with CAMA requirements and is located in the Appendix. The relationship between county policies and this map is very important since the land classifications will reflect policies adopted by governing boards.

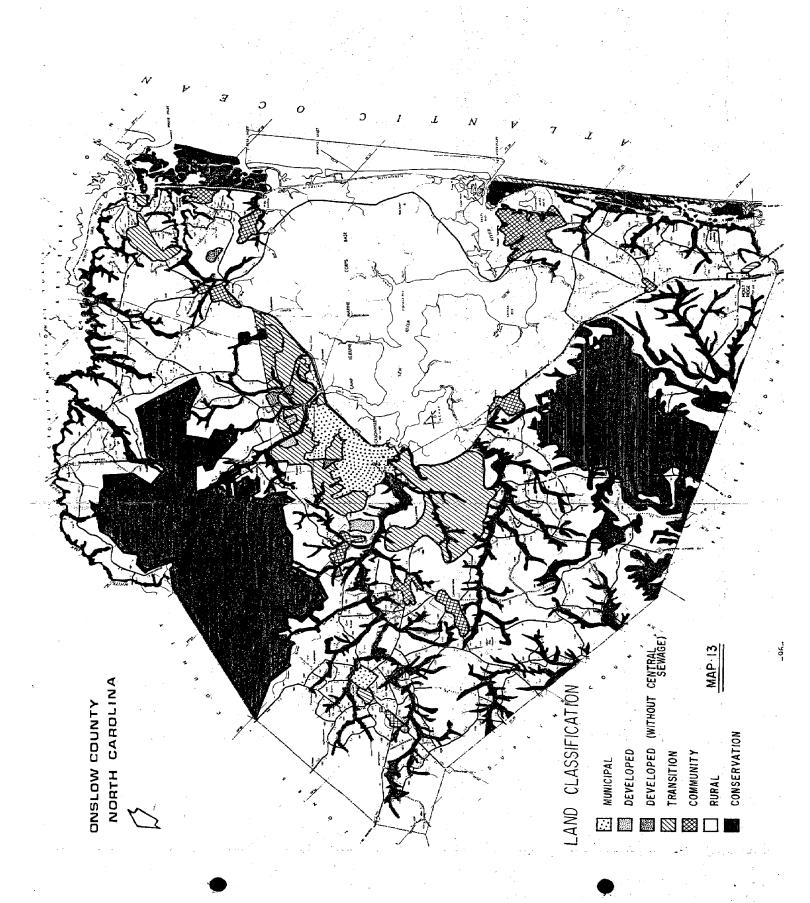
Land Classification and Local Policies

- 1.a. <u>Developed</u> Areas to be classified developed include lands currently developed for urban purposes at or approaching a density of 500 dwellings per square mile that are provided with usual municipal or public services including at least public water, sewer, recreational facilities, police and fire protection. Areas which exceed the minimum density but which do not have public sewer service may best be divided into a separate class to indicate that although they have a developed character, they will need sewers in the future.
- 1.b. <u>Developed Without Central Sewer</u> These areas fit into the basic Developed classification but are not served by a central sewer system.
- 2. <u>Transition</u> The purpose of the transition class is to provide for future intensive urban development within the ensuing ten years on lands that are most suitable and that will be scheduled for provision of necessary public utilities and services. The transition lands also

provide for additional growth when additional lands in the developed class are not available or when they are severely limited for development.

- 3. Community The purpose of the community class is to provide for clustered land development to help meet housing, shopping, employment, and public service needs within the rural areas of the county. Lands to be classified community are those areas within the rural areas of planning jurisdictions characterized by a small grouping of mixed land uses, (residences, general store, church, school, etc.), and which are suitable and appropriate for small clusters of rural development not requiring municipal sewer services.
- 4. Rural The purpose of the rural class is to provide for agriculture, forest management, mineral extraction and other low intensity uses.

 Residences may be located within "rural" areas where urban services are not required and where natural resources will not be permanently impaired. Lands that can be indentified as appropriate for resource management and allied uses include lands with high potential for agriculture, forestry, or mineral extraction; lands with one or more limitations that would make development costly and hazardous; and lands containing irreplaceable, limited, or significant natural, recreational, or scenic resources not otherwise classified.
- 5. Conservation The purpose of the conservation class is to provide for effective long-term management of significant limited or irreplaceable areas. This management may be needed because of its natural, cultural, recreational, productive or scenic values. These areas should not be identified as transition lands in the future. This class should contain the following major wetlands; essentially undeveloped shorelands that are unique, fragile, or hazardous for development; necessary wild-life habitat or areas that have a high probability for providing necessary habitat conditions; publicly owned watersupply watersheds and aquifers; and forest lands that are undeveloped and will remain undeveloped for commercial purposes.



APPENDIX

PUBLIC PARTICIPATION

Public participation in the Land Use Plan Update was extremely beneficial to the development of land use issues, policies and implementation methods.

An initial meeting was held with the Onslow County Board of Commissioners to inform them and the public that work on the plan had begun. The importance of developing a good, workable plan was stressed.

A Land Use Advisory Council was formed from interested citizens who wanted input into the plan. This group met publicly at least five times to review data, discuss land use issues, and recommend policies to handle those issues. These recommendations were forwarded to the County Planning Board for review and most of them were used in the Land Use Plan Update. Represented on the Land Use Advisory Council were the schools, fishing interests, farming interests, the Marine Corps, real estate interests, the City of Jacksonville, minority interests and other citizens.

Different techniques were used to involve the public. They included radio spots, newspaper articles, public meetings, speaking to citizens groups, speaking to school groups and questionnaires. Approximately 3,500 questionnaires were distributed and 733 were returned (21%).

The following groups and organizations were contacted and land use planning issues were discussed: Onslow County Water Department, Agricultural Extension Service, Onslow County Health Department, local realtors and surveyors, local fishermen, local farmers, North Carolina Dept. of Transportation, representatives of all towns in Onslow County, representatives of all counties surrounding Onslow County, Onslow County Economic Development Commission, Onslow County Board of Education, and many more. Many of these groups were involved in several working sessions. These sessions led to specific policies which have been incorporated in this land use plan.

Coverage by local radio stations and newspapers also provided a great deal of information to those citizens who could not attend meetings when the land use plan was discussed.

In addition, two advertised public hearings were held in Jacksonville.

DATA COLLECTION AND ANALYSIS

Data concerning Onslow County was collected from a number of sources, such as publications from various public and private agencies, conversations with staff members of these agencies and other sources. These sources are listed below:

PUBLICATIONS

Onslow County School Survey Report, 1979 - 80, North Carolina Department of Public Instruction, Division of School Planning.

Onslow County Land Use Plan, 1976

Town of Richlands Land Use Plan, 1980

Town of Swansboro Land Use Plan, 1980

City of Jacksonville Land Use Plan, 1980

North Carolina Population Projections, 1980. North Carolina Department of Administration, Division of State Budget and Management.

Onslow County Water System Study, 1979 - 80 - 81. Pridgen and Consultants, New Bern, N.C.

Onslow County Beach Access Plan, 1979. John J. Hooton & Associates, Wilmington, N.C.

Environmental Effects of Potential Development. Activities in Coastal Onslow County, 1980. John J. Hooten & Associates, Wilmington, N.C.

North Carolina State Government Statistical Abstract, 1979, North Carolina Department of Administration, Division of State Budget and Management

Onslow County Flood Hazard Boundary Maps, U.S. Department of Housing and Urban Development.

Soil Survey Maps for Onslow County, U.S. Department of Agriculture, Soil Conservation Service, (mapping in process).

Laws and Rules for Ground Absorption Sewage Disposal Systems of 3,000 Gallons or Less Design Capacity, 1977. North Carolina Department of Human Resources, Division of Health Services.

North Carolina Administrative Code - Subchapter 7B - CAMA Land Use Planning Guidelines, September, 1979.

Average Daily Traffic Volumes, North Carolina Department of Transportation.

Travel Survey For North Carolina, 1975 - 76 - 77 - 70. North Carolina Department of Commerce, Travel and Tourism Division.

Statistical Summary of Onslow County, N.C., Onslow County Planning Department, 1972.

Onslow County Annual Land Utilization and Crop Acreages, 1974 - 78. North Carolina Department of Agriculture.

Commerical Fishing Catches, 1975 and 1979. North Carolina Department of Natural Resources and Community Development, Division of Marine Fisheries.

Onslow County Statistical Summary, 1968. Onslow County Planning Department

Forest Statistics for Southern Coastal Plains, U. S. Department of Agriculture.

Onslow County Archeological Assessment, 1979. North Carolina Department of Human Resources, Division of Archives and History.

Region P Multi-County Statistical Data, May, 1972, Neuse River Council of Governments.

AGENCIES AND ORGANIZATIONS

Camp Lejeune Marine Corps Base

Employment Security Commission of North Carolina, Bureau of Employment Security Research.

- U.S. Department of Commerce, Bureau of the Census.
- U.S. Department of Commerce, Census of Agriculture.
- U.S. Department of Commerce, Bureau of Economic Analysis.

Office of Coastal Management, North Carolina Department of Natural Resources and Community Development.

Onslow County Planning Board.

Onslow County Citizens Advisory Council.

Onslow County Community Resource Development Committee.

North Carolina Crop and Livestock Reporting Service.

North Carolina Wildlife Resources Commission

INDIVIDUALS

Dr. Gilbert W. Bane, U.N.C. - Wilmington

Paul Denison, Henry Von Oesen and Associates, Wilmington, N.C.

Bill Burnette, Henry Von Oesen and Associates, Wilmington, N.C.

Town Clerk, Town of Holly Ridge.

Sherman Husted, Jacksonville Chamber of Commerce.

Ron Baker, Onslow County Economic Development Commission.

Richard Koonce, Onslow County Health Department.

John Riggs, Onslow County Parks and Recreation Department.

Andy Ennett, Onslow County Soild Waste Department

Sarah Humphries, Onslow Clean County Coordinator.

Dan Baucom, Onslow County Agricultural Extension Chairman.

Harry Tyson, Soil Conservation Service.

Don Herman, Onslow County Civil Preparedness Director/Fire Marshall.

ONSLOW COUNTY PLANS, POLICIES AND REGULATIONS

The following plans, policies and regulations are being enforced or followed by the Onslow County Board of Commissioners as related to the use of land:

REGULATIONS

- Onslow County Zoning Ordinance The Onslow County Zoning Ordinance was initially adopted February 17, 1969, and has been amended four times since then. Only West Onslow Beach and county property at Albert Ellis Airport are zoned. The Onslow County Planning Board is presently working on a new, more up-to-date zoning ordinance. This Ordinance is administered by the Onslow County Planning Department.
- 2. Onslow County Subdivision Regulations The Onslow County Subdivision Regulations were initially adopted in September, 1979 and have been amended once. This Ordinance regulates all new residential subdivisions in Onslow County's jurisdiction with the County Planning Board having subdivision review. This Ordinance is administered by the Onslow County Planning Department.
- Systems These regulations control the use of sanitary sewage disposal systems with a design capacity of 3,000 gallons or less serving a single or multi-family residence, place of business, or place of public assembly. The Onslow County Health Department administers these regulations.
- 4. State Building Code All new construction and repairs must conform to State standards. The building code is enforced by the Onslow County Inspections Department.
- 5. Coastal Area Management Act These regulations are enforced through minor permits (local enforcement) and major permits (state and local enforcement). All development within Areas of Environmental Concern is subject to review. This law is enforced by the Onslow County Planning Department and the North Carolina Office of Coastal Management.

- 6. Ordinance Governing Motor Driven Vehicles and Horses at West
 Onslow Beach This Ordinance regulated the time, type and
 location of beach strand vehicle traffic. It is enforced by
 the Onslow County Litter Warden and the Onslow County
 Sheriff's Department.
- 7. Onslow County Water Ordinance This Ordinance governs the installation, maintenance, fees, charges, rates, inspection, extention and all appurtenances of the Onslow County Water System. The Water Ordinance is enforced by the Onslow County Water Department.
- 8. Flood Hazard Ordinance A study showing areas subject to inundation by a 100-year flood is presently being prepared by the U. S. Army Corps of Engineers. Upon completion of the Study a Flood Hazard Ordinance will be adopted which will address building requirements in flood prone areas.

 Onslow County is now under the emergency program.

PLANS AND POLICIES

- 1. County Soil Survey A detailed soils survey containing maps and soils information has been prepared for approximately 40% of Onslow County. This soils data is valuable to farmers, developers, the Onslow County Health Department, the Onslow County Planning Department and others.
- 2. Community Development Program Onslow County submitted a pre-application for 1981 funds for the Georgetown community. The work was accomplished through the combined efforts of Onslow County Government, Region P (Community Action Agency), and the Wilmington field office of the North Carolina Department of Natural Resources and Community Development.
- 3. Onslow County Land Use Plan The initial plan was adopted in 1976 and includes discussions on goals and objectives, land use trends and issues, population projections, land classifications, economic trends, various ordinance recommendations, potential areas of environmental concern, county resources and future land needs. Future plans should be compatible with the base.
- 4. Recreation Plans In addition to the multi-purpose recreation park on Onslow Pines Road, a passive park is being developed in the Hubert Community and a Land and Water Conservation Fund grant of \$56,000 has been applied for to develop a county park at West Onslow Beach. The land was donated to Onslow County by Edgar Yow of Wilmington, North Carolina.
- 5. <u>Implementation and Enforcement Plan</u> This is an outline to follow for Onslow County to properly guide development in Areas of Environmental Concern.

6. Growth Center Designation - For purposes of future development, West Onslow Beach has been designed a Seasonal Growth Center by the State of North Carolina.

STATE PERMITTING LAWS AND LICENSES

Department of Natural Resources and Community Development,

Division of Environmental Management - Permits to discharge
into surface waters or operate waste water treatment plants
or oil discharge permits; NPDES Permits, (G.S. 143-215).

Permits for septic tanks with a capacity of over 3,000 gallons/
day (G.S. 143-215.3). Permits for withdrawal of surface or
ground waters in capacity use areas (G.S. 143-215.15). Permits
for air pollution abatement facilities and sources (G.S. 143-215.108).

Permits for construction of complex sources; e.g., parking lots,
subdivisions, etc. (G.S. 143-215.109). Permits for construction
of a well over 100,000 gallons/day (G.S. 87-88).

Department of Natural Resources and Community Development,

Office of Coastal Management - Permits to dredge and/or fill
in esturaine waters, tidelands, etc. (G.S. 113-229). Permits to
undertake development in Areas of Environmental Concern (G.S. 113A-118).
Note: Minor development permits are issued by the local government.

Department of Natural Resources and Community Development,
Division of Earth Resources - Permits to alter or contruct a dam
(G.S. 143-215.66). Permits to mine (G.S. 74-51). Permits to drill
an exploratory oil or gas well (G.S. 113-381). Permits to
conduct geographical exploration (G.S. 113-391). Sedimentation
erosion control plans for any land disturbing activity of over
one contiguous acre (G.S. 113A-54).

Department of Natural Resources and Community Development, Secretary of NRCD - Permits to construct an oil refinery.

<u>Department of Administration</u> - Easements to fill where lands are proposed to be raised above the normal high water mark of navigable waters by filling (G.S. 146.6 (c)).

Department of Human Resources - Approval to operate a solid waste disposal site or facility (G.S. 130-166.16). Approval for construction of any public water supply facility that furnishes water to ten or more residences (G.S. 130-160.1).

FEDERAL PERMITTING LAWS

AND LICENSES

U.S. Army Corps of Engineers (Dept. of Defense) - Permits required under Sections 9 and 10 of the Rivers and Harbors Act of 1899; permits to construct in navigable waters. Permits required under Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972. Permits required under Section 404 of the Federal Water Pollution Control Act of 1972; permits to undertake dredging and/or filling activities.

Coast Guard (U.S. Dept. of Transportation) - Permits for bridges, causeways, pipelines over navigable waters; required under the General Bridge Act of 1946 and the Rivers and Harbors Act of 1899. Deep water port permits.

U.S. Geological Survey, Bureau of Land Management (U.S. Dept. of Interior) - Permits required for off-shore drilling.

Approval for OCS pipeline corridor rights-of-way.

Federal Energy Regulatory Commission - Permits for construction, operation and maintenance of interstate pipelines facilities required under the Natural Gas Act of 1938. Orders of interconnection of electric transmission facilities under Section 202 (b) of the Federal Power Act. Permission required for the abandonment of natural gas pipeline and associated facilities under Section 7C (b) of the Natural Gas Act of 1938. Licenses for non-federal hydro-electric projects and associated transmission lines under Sections 4 and 5 of the Federal Power Act.

OTHER NON-PERMITTING LAWS

Federal

National Historic Preservation Act of 1966.

The Archeological and Historic Preservation Act of 1974, Public Law 93-291.

Executive Order 11593, Protection and Enhancement of the Cultural Environment, 16 U.S.C. 470 (Supp. 1, 1971).

National Environmental Policy Act, Public Law 91-190, 42 U.S.C. 4321 Et. Seq. (1970).

Community Development Act of 1974, Public Law 93-383: Environmental Review Procedure for the Community Development Block Grant Program (40 CFR Part 58).

Procedures for the Protection of Historic and Cultural Properties (36 CFR Part 800).

Comprehensive Planning Assistance Program (701) as amended by Public Law 93-393.

The Department of Transportation Act of 1966; Public Law 89-670. Identification and Administration of Cultural Resources: Procedures of Individual Federal Agencies.

State

G.S. 121-12(a) Protection of Properties in the National Register. State Environmental Policy Act. Executive Order XVI.
Indian Antiquities, G.S. 70.1-4.
Salvage of Abandoned Shipwrecks and Other Underwater Archeological Sites: G.S. 121-22, 23; 143B-62(1) g, (3).
Archeological Salvage in Highway Construction, G.S. 136-42.1 Provisions for Cultural Resources in Dredging and Filling Operations, G.S. 113-229.

ONSLOW COUNTY LAND USE PLAN QUESTIONNAIRE RESULTS

733 Responses

1. a. ARE YOU A PERMANENT RESIDENT OF ONSLOW COUNTY?

Yes - 623 (85%)

No - IIO (15%)

b. WHAT TOWNSHIP?

 Jacksonville - 361 (54%)
 Swansboro - 29 (4%)

 Stump Sound - 104 (15%)
 White Oak - 70 (10%)

 Richlands - 113 (17%)

WHAT: IS YOUR AGE?

5 - 14: 14 (2%) 15 - 24: 34 (5%) 25 - 34: 280 (39%)35 - 44: 249 (35%)45 - 54: 53 (8%) 55 - 64: 33 (5%) 65 and above: 43 (6%)

- 3. a. DOES MORE THAN ONE FAMILY LIVE HERE?
 Yes 79 (11%)
 No 668 (89%)
 - b. DO YOU LIVE IN A:
 Single Family House? 602 (79%)
 Duplex 11 (2%)
 Apartment 37 (5%)
 MObile Home 110 (14%)
- 4. WOULD YOU LIKE THE POPULATION OF ONSLOW COUNTY TO:
 Increase Greatly? 149 (20%)
 Increase Slightly? 161 (22%)
 Stay the Same? 163 (22%)
 Decrease Slightly? 38 (5%)
 Decrease Greatly? 27 (4%)
 No Opinion 200 (27%)
- 5. DO YOU FEEL THAT DIFFERENT TYPES OF LAND USES SUCH AS RESIDENTIAL, COMMERCIAL AND INDUSTRIAL SHOULD BE:
 Separated As Much As Possible 570 (79%)
 Allowed to Develop Without Restrictions 150 (21%)
- WHAT TYPES OF DEVELOPMENT WOULD YOU LIKE TO SEE IN YOUR NEIGHBORHOOD?

 Residential: Yes 361 (79%) No 94 (21%)

 Commercial: Yes 111 (36%) No 197 (64%)

 Industrial: Yes 174 (39%) No 273 (61%)

 Public Recreation: Yes 382 (85%) No 66 (15%)

Other: Nothing - 4

Senior Citizens - 1 Status Quo - 1

Renewal - 2

Wildlife Reserve - 1

Schools - 1 Farming - 1 Country - 1

Little as Possible - 1

7. WHAT DO YOU LIKE MOST ABOUT ONSLOW COUNTY?

> Beaches - 130 Nice People - 110

Climate - 46

It's My Home - 41

Recreation - 38

Rural Areas - 34

School System - 32

Way of Like - 18

Good Shopping - 17

Hunting and Fishing - 13

Quiet, Clean County - 13

Scenic Countryside - 13

Access to Water - 10

Country Living - 8

Open Space - 8

Good Law Enforcement - 8

The Location - 7

Environment - 5

Wooded Areas - 5

Low Cost of Living - 5

Clean Air - 5

Good Farming - 5

Camp Lejeune Close - 4

Attractiveness - 4

Industry - 4

New Mall - 4

System of Government - 4

Access to Everything - 3

Onslow County - 3

Small Town Southern Living - 3

Good Jobs - 3

Churches - 3

Nice Place - 3

Community College - 3

No Traffic Problems - 3

Existing Population - 3

Growth Potential - 3

Reasonable Taxes - 2

Little or Nothing - 2

Good Land - 2

Water System - 2

Hospital - 2

Slow Pace - 2

Everything - 2

Sanitary Efforts - 2 Community Pride - 2 Reasonable Housing - 2

ALL THE REMAINDER HAD 1 RESPONSE

ECU Extension

Good Roads

Politicians

Agriculture

Ext. Service

Size

Country People

Shrimp

Things to Do

Clubs

Dumpsters

Onslow Pines Park

Near Relatives

Close to Job

Town Services

New River

Sneads Ferry

Dixon School

People Tend to Own Business

Same as Carteret and Craven

Volume of Business

Close State Parks

Not Over-crowded

Close Fire and Rescue Service

Extra-curricular Activities

Estuarine Areas

Civilians

Resources

Small Towns

Historical Items

Naval Hospital

Stable Economy

Courthouse

Post Office

8. WHAT DO YOU LIKE LEAST ABOUT ONSLOW COUNTY?

Crime and Violence - 148 Poor Roads - 69 Poor School System - 30 Lack of Recreation - 29 Too Many Marines - 29 Lack of Jobs - 28 Little Public Transit - 23 Camp Lejeune - 23 Bars - 20 Low Pay - 19 Court Street Area - 15 Adult Businesses - 15 Lack of Shopping Centers - 15 Attitude of Government Agencies - 12 Drug Problem - 11 Jacksonville - 10 Lack of Industry - 9 Litter - 7 Summer Insects - 7 High Property Taxes - 7 Beautification of County - 7 Hospital and Medical Service - 6 Distance From Large Towns - 5 Poor, Scattered Shopping - 5 Lack of Police Officers - 4 Crooked Politicians - 4 Humidity and Climate - 4 Poor Leadership - 4 Sprawl - 3 Lack of Zoning - 3 Too Political - 3 Lack of Good Entertainment - 3 Inflation - 3 Upkeep of Beaches - 3 No Civic Center - 2 Highway 17, South - 2 High Living Costs - 2 Lack of Sidewalks - 2 Too Much Welfare - 2 County Commissioners - 2 Education - 2 Businesses Rip Off Marines - 2 Treatment of Military - 2 Small Size of Sheriff's Dept. - 2 Unfair Government and Taxes - 2 Housing - 2 Haphazard Zoning - 2 Too Many Gas Stations - 2 Phone System - 2 Lack of Overall Planning - 2 Government Controls - 2 County Water System - 2

ALL THE REMAINDER HAD 1 RESPONSE No Unions City Annexation Too Much Spent on Education Over-publicizing Crimes Greedy Local Merchants Lack of Facilities Strict Court Sentences Gum Branch Road Too Small Unsed Land Wasted Volumed Of Business Affecting Community Lack of Family Entertainment Government Interference in Growth Rural Schools Get Less Poverty Delays in Police Answering Calls Slow Development High Electric Bills Housing Development Too Many Rental Homes Drainage Ditches. Lazy People No YMCA or YWCA No TV Station Slow County Administration Lack Of Camping Areas Lack of Concern for Dixon School Lack of Good Dining Places Lack of Beautification Population Lack of Cultural Events Not Enough People Soft Court System Stop Lights Need for Shopping on Hwy 17, South Run-down Residential Areas -Deer Hunting Teen Driving School Buses New River Inlet No Dog Catchers Traffic Problems Pollution [] Forbidden Use of Glass and Cans on the Beach Lack of Environmental Protection Can't Do Anything Without a Permit

Lack of Business Competition

Trees Electrical Restrictions Stink Accident Benefits Building Inspections Unfair Law Enforcement Banks Inept Elected County Officials Secretive Hospital Authority Way Social Services Works Impossible Self-indulgent Government Lack of Overall Planning Lack of Beach Access Military Influence Pea-brained Government People Aggressive Growth Racial Injustice News Publications in Paper Procedure to Aid the Poor Georgetown

9. WHAT IS YOUR OPINION OF THE LEVEL OF SERVICES PROVIDED BY THE COUNTY IN THE FOLLOWING AREAS?

- A. MOSQUITO CONTROL AND DRAINAGE
 Needs More Attention 487 (71%)
 Adequate 193 (28%)
 Needs Less Attention 5 (1%)
- b. PARKS AND RECREATION
 Needs More Attention 444 (66%)
 Adequate 218 (32%)
 Needs Less Attention 16 (2%)
- ROADS AND HIGHWAYS (Not a county function but asked for a response anyway.)

 Needs More Attention 532 (76%)
 Adequate 165 (24%)
 Needs Less Attention 3 (<1%)
- d. SCHOOLS
 Needs More Attention 469 (68%)
 Adequate 214 (31%)
 Needs Less Attention 7 (1%)
- WATER AND SEWER
 Needs More Attention 307 (47%)
 Adequate 315 (49%)
 Needs Less Attention 25 (4%)
- f. PUBLIC TRANSIT
 Needs More Attention 439 (69%)
 Adequate 167 (27%)
 Needs Less Attention 26 (4%)

- g. INDUSTRIAL DEVELOPMENT

 Needs More Attention 462 (72%)

 Adequate 145 (22%)

 Needs Less Attention 38 (6%)
- h. ENVIRONMENTAL PROTECTION
 Needs More Attention 320 (50%)
 Adequate 284 (45%)
 Needs Less Attention 32 (5%)
- i. LAND USE PLANNING Needs More Attention - 352 (57%) Adequate - 241 (39%) Needs Less Attention - 28 (4%)
- j. LAW ENFORCEMENT Needs More Attention - 425 (64%) Adequate - 234 (35%) Needs Less Attention - 5 ((1%))
- k. LIBRARIES

 Needs More Attention 238 (36%)

 Adequate 401 (60%)

 Needs Less Attention 24 (4%)
- 1. GARABAGE COLLECTION
 Needs More Attention 208 (32%)
 Adequate 430 (65%)
 Needs Less Attention 19 (3%)
- m. FIRE PROTECTION

 Needs More Attention 208 (32%)

 Adequate 423 (66%)

 Needs Less Attention 15 (2%)
- n. RESCUE AND AMBULANCE
 Needs More Attention 246 (37%)
 Adequate 403 (61%)
 Needs Less Attention 13 (2%)
- o. BEACH PARKING AND ACCESS

 Needs More Attention 377 (58%)

 Adequate 237 (37%)

 Needs Less Attention 30 (5%)
- P. HOSPITAL AND HEALTH CARE
 Needs More Attention 383 (55%)
 Adequate 289 (42%)
 Needs Less Attention 18 (3%)
- q. ROAD NAME SIGNS
 Needs More Attention 340 (50%)
 Adequate 311 (46%)
 Needs Less Attention 26 (4%)

10. WOULD YOU BE WILLING TO PAY FOR ADDITIONAL LEVELS OF SERVICE YOU FEEL NEED MORE ATTENTION?

Yes - 453 (67%) No - 221 (33%)

11. WHAT AREAS, COMMUNITIES OR SITES NEED TO BE PROTECTED FROM UNWISE

DEVLOPMENT? Beaches (Coast) - 149 Woodlands - 49 Residential Areas - 48 Entire County - 40 Rural, Agricultural Areas - 29 River Areas - 19 Downtown Jacksonville - 11 Parks - 8 Urban Areas - 6 Wildlife Areas - 5 Historical Areas - 5 Highway 17 - 5 🛾 Estuarine Areas - 4 None - 4 Court Street - 4 Piney Green Road - 4 Highway 24 - 4 White Oak Twp. - 3 College Park/Brynn Marr - 3 Around Schools - 2 Commercial Areas - 2 Marshland - 2 Country Club - 2 Bar Areas - 2 Southwest Area - 2 Northwoods - 2 Cardinal Village - 2

ALL THE REMAINDER HAD 1 RESPONSE

Near Camp Lejeune Back Swamp City Hall Parks and Recreation Hubert Meadow Oaks Swansboro Area Garbage Sites Country Club Walnut Creek Regalwoods Haws Run Elizabeth Lake Shopping Centers Western Blvd. Sneads Ferry Billboards Lauradale Branchwood

Weyerhauser Property
Waterway
New River Inlet
Gum Branch Road
Hoffman Forest
Hall of Onslow County
Recreation Areas
Industrial Sites
Onslow Pines Road
Slums
Outside City Limits
Montclair
Fishing Village
Private Property
Piney Green Area

12. WHAT IS YOUR OPINION OF STATE CONTROL OF LOCAL LAND DEVELOPMENTS (CAMA)?

Good - 54
No Control - 42
Should Be Locally Controlled - 38
Should Not Have Control - 27
Need More Control - 26
Less State Control - 24
Should Be State Controlled - 6
Some State, Some County Control - 5
Necessary - 4
Could Be Improved - 3
Glad To See It - 2
Too Strict at Times - 2
Poor - 2
It Stinks - 2

ALL THE REMAINDER HAD I RESPONSE

Very Low It's Bad But Needed Moderate Regulation Suffices Guarded Fair Controlled Us Out of Existence Fine As Long As Coastal Governments Have Input Hasn't Obtained Public Support State Already Takes Too Much Wise and Saves Money Leave Hand to Nature Bureaucratic/Communistic Plot Waste of Money Infringes on Property Rights Needed for Beach Keep the State Out Gives Time for Public Input Too Much Control Adequate I Like It Needed But Isn't Effective ... State Control Needed Due to Local Neglect Owner Should Control Not Strong Enough Abolish it

13. DO YOU FEEL SOME PORTIONS OF ONSLOW COUNTY NEED MORE LAND USE

PLANNING AND WHERE?

Beaches and Coast - 56

Highway 17 - 16

Urban Areas - 16

Western Blvd. - 15

Rural Land - 11

Residential Areas - 10

Downtown Jacksonville - 8

Marsh - 7

Industrial Sites - 7

Court Street - 7 New River Area - 7 Sneads Ferry - 6 Richlands - 5 Gum Branch Road - 5 Whole County - 4 Highway 24 - 4 Jacksonville - 3 Swansboro - 3 Piney Green Road - 3 Commercial Areas - 3 Catherine Lake - 2 Jacksonville Suburbs - 2 Georgetown - 2 Southwest Area - 2 Park - 2 Woodlands - 2 Highway 258 - 2 Bell Fork - 2 Drug Areas - 2 Separate Residential and Commercial - 2

ALL THE REMAINDER HAD 1 RESPONSE

Sandy Run New Bridge Street Commercial Areas, Dixon Road Area Parts of Highway 258 Around Camp Lejeune Holly Ridge Around Our Farms Landfill Lejeune Blvd. Hwy. 70 Unused Camp Lejeune Land Weyerhauser Area Behing Cardinal Village Keep Apartments Away from Single Family Houses Stump Sound Traffic Hubert Area Nine-Mile Area Adult Businesses White Oak Estates Estuarine Areas

14. WHAT ARE GOALS ONSLOW COUNTY SHOULD PURSUE?

More Industry - 94
Better Roads - 67
Parks and Recreation - 63
More, Nicer Schools - 47
Cut Down Crime and Violence - 36
More Jobs - 32
Better Law Enforcement - 19
Long Range Planning - 15

Public Transit - 13 Civic Center - 12 Better Paying Jobs - 9 Close Adult Businesses - 8 Sewer - 5 Don't Allow Bars - 5 Control Coastal Development and Erosion - 5 Zoning - 5 Wildlife Refuge - 4 More Housing - 3 Better Education - 3 More Confidence in Local government - 3 Discourage Industry - 3 More Public Facilities - 2 Increase Litter Control - 2 Adequate Hospital and Health Care - 2 Wise Land Use - 2 Improved Quality of Like - 2 Keep up With Others - 2 Protect Rural Communities - 2 Honesty in Government - 2 No Improvements - 2 More Deputies - 2 More Money for Out-of-town Schools - 2 Dog Catcher - 2 Control Drugs and Alcohol ~ 2 Road Signs - 2 Better Wateways - 2 Cultural Development - 2 Help Old People - 2 More Blacks in Planning - 2

ALL THE REMAINDER HAD 1 RESPONSE

Put Those on Welfare to Work

Family Oriented Activities Balance Growth Environment Livability Improve Public Image Community Crime Watch Requires Permit for Some Recreation and Not Others Better Water and Sewer Better Fire and EMT Leave Forests Less Political Bias and More Sound Reasoning Behind Spending Treat Military Better Keep Good Schools Younger-more Competent Persons in Key Positions Better Beach Access Tourism Improve Coastal Carolina CC Paid Fire and Rescue Workers Clean Out Rivers Widen Hwy. 258 Shouldn't have Long Distance Calls in the County,

Recuit Doctors Expand Hospital New County Commissioners Increase Aid to Schools Diversified Farming Provide Sewer Around Jacksonville Adult Bus Drivers Orient Non-Rural Population Bring in Non-polluting Industries Best County in N.C. Clean up Court Street Keep Young People Here More Waste Containers Maintain What We Have Stop Drunks From Driving Fulfill Needs of Residents More Churches Improve Septic Tank Inspections Building Improvements Have Central Government Clean Up Jacksonville Protect Woodlands Better Administration of County Tax Dollars Attend to Small Town Needs Work Together Dixon High Cafeteria Zoo Raise More Money Delete Rigid Restrictions Treat People as Human Beings Better Military-Civilian Relations Take Care of Young People Family-oriented Businesses Libraries Renovate Downtown Jacksonville Have People With Common Sense Run the County Obtain Taxes from Homeowners Who Are Listed as Out-of-town Residents Remain the Same Marine Corps Museum Get Competent Officials Better Low-Income Housing Higher Living Standards Equal Representation of Political Parties Insect Control Hire Professional County Manager

15. WHAT RECREATIONAL ACTIVITIES AND FACILITIES WOULD YOU (OR DO YOU) OR YOUR FAMILY USE IF AVAILABLE IN ONSLOW COUNTY?

Community Center - 273 (35%)

Swimming Pool - 414 (54%)

Tennis Courts - 295 (38%)

Bowling - 271 (35%)

Golf - 124 (16%)

Baseball, Basketball, Football - 327 (42%)

Bike Trails - 323 (42%)

Hiking Trails - 271 (35%)
Hunting and Fishing - 212 (27%)

Others:
YMCA - 5

Traget Practice Areas - 4

Jogging Trails - 4

Skating - 4

Raquetball Courts - 3

Beach - 3

Soccer - 3

Concerts - 2

Boating - 2

Dancing - 2

Camping - 2

Movies - 2

ALL THE REMAINDER HAD 1 RESPONSE

Teen Recreation
Arts and Crafts
Parks
Exercize Classes
Karate
Kiddie Parks
Putt-Putt
Horse Trails
Big Events
Hobby Shops
Motorcross
Auditoriums and Gyms
Christian Fellowships

16. ADDITIONAL COMMENTS

County Facilities Built Other in Jacksonville - 6
More Police Protection - 5
More Factories - 3
More Commercial Areas - 3
More Access to Water - 2
Unannounced Nursing Home Inspectors - 2
Stiffer Penalties for Crimes - 2
More Public Transit - 2
Clean Drainage Ditches - 2
Nice Place To Live - 2
Park With Animals - 2
More Jobs - 2
Don't Need CAMA - 2

ALL THE REMAINDER HAD 1 RESPONSE

Seasonal Amusement Park

Do Away With County Fair

Watch Your Beaches

Need More Culture

Chastize Newspaper for Closed Attitude

More School Classrooms

Future Industries Follow Strict Water and Air Standards

Four-lane Gum Branch Road and Western Blvd.

Connect Western Blvd. and Gum Branch Road Keep up Roadsides Widen Shoulders of Hwy. 258 for Bikes Children Sitting on Floor to Eat Lunch is Bad Jobs for Military Wives Encourage Orderly Development Too Much Done for Jacksonville Nothing for Children to Do in Richlands Supervise Commercial and Industrial Development More Roadwork Mall Put in Wrong Place Area Too Crowded Inadequate Roads Clean up Hwy. 17, South Handle and Supervise Schools Differenty See Area Grow Dixon School Neglected More Money for Rural Schools More Rural Recreation Facilities Grant to Study Donated Beach Property a Rip-off Sending out Questionnaire Encouraging Rid County of Run-down Trailers Litter Control Need Camp Grounds TV Station Poor Availability of Jobs Keep Military on Base Need Coliseum More Sidewalks Schools Need More Money Better School System YMCA Visability of Street Lines When Wet Should Issue ABC License to Anyone Bars Centrally Located County Slow To Develop Need More Entertainment More Christian Fellowship Make County Safer County needs Careful Planning Work Foward to Growth Outdoor Theater

